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# AMERICA MORE BEAUTIFUL



**GREENING'S  
BOOK OF  
NURSERY PRODUCTS**

**THE GREENING NURSERY CO.**  
MONROE MICHIGAN  
LARGEST GROWERS OF TREES IN THE WORLD









General Catalogue  
*of*  
**The Greening Nursery Company**  
Monroe, Michigan

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BENJ. J. GREENING  
VICE-PRESIDENT



EDW. G. GREENING  
SECRETARY-TREASURER  
GENERAL MANAGER



CHARLES E. GREENING  
PRESIDENT  
AND CONSULTING  
HORTICULTURIST



H. L. STEINER  
SALES AND OFFICE  
MANAGER



W. GREENING  
SUPERINTENDENT OF  
NURSERIES

---

Growers of Everything for the  
Orchard, the Park and the  
Ornamental Garden

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1500  
Acres

Landscape Architects

Established  
1850

Largest Growers of Trees in the World

Truth---the whole truth, and nothing  
but the truth--is the basis on  
which we solicit your business,  
because a continued patron-  
age is our constant aim.



# The Story of the Nursery



The late J. C. W. Greening

Emerson, America's most noted philosopher, once said that "a business was only the lengthened shadow of a man."

If this be true then the Greening Nursery Company is but the lengthened shadow of the late J. C. W. Greening, founder of Greening's Big Nurseries, who was a professional gardener in Germany. He came to America in the forties and began the nursery business in Monroe in 1850. He was the father of Charles E. Greening, now President of The Greening Nursery Company, and one of the best posted men on the nursery and landscape business in America.

Each year since the inception of our business a distinct advance has been made. The management has continued in direct line since J. C. W. Greening made his humble beginning in 1850, he being succeeded by his two sons, Charles E. and George A. Greening, in 1883. The picture shown on the next page represents the complete outfit with which the Greening Brothers started in business in that year—a few tools, one horse and practically no capital. They did have, however, a large supply of that commodity which money does not purchase, namely, knowledge of their profession and determination to make it yield them returns.

The simple little house in the picture was the old home. Around this modest place were thirty acres of the finest land that one could find in a day's journey. This thirty acres constituted the original nursery. The business has now spread over fifteen hundred and thirty acres of land in the same section where the start was made. The original thirty acres is still producing.

Very naturally we are proud of the growth and advancement which has been made. Our patrons may judge for themselves whether our present status has been earned or not. From our humble beginning we have grown to among the largest producers of nursery stock in the world. Hard work and honorable business methods have been responsible.

The nursery in its entirety is now under the direct supervision of the third generation—Mr. Edward G. Greening, youngest son of Charles E. Greening. Mr. Edward G. Greening began active work in the nursery in early boyhood under the personal direction of his father, Charles E. Greening. He continued in the practical study of active field work until having mastered the practical end he began his studies in Horticulture, Forestry and Landscape work under the direction of Prof. Liberty H. Bailey, Dean of the Agricultural Department of Cornell University, at Ithaca, N. Y. Mr. Greening graduated with high honors at Cornell, and upon finishing his course, immediately came home and again took up the practical end of the business.

Proving himself a master of his profession, the entire management of the business was given him. Under his skillful guidance it has grown by leaps and bounds until today the annual volume of business is greater than ever in all departments.

The old maxim "Nothing succeeds like success" was paraphrased by Josh Billings into "Never argy agin a sucksess," so please bear in mind there is always a reason where success obtains.

That "reason" in this Company is because each and every official of it has ever and always been a practical man—efficient in his line—as well as standing well to the top among the scientific and theoretical authorities.

And from its humble beginning, away back in 1850, this business has been gradually changed from a business to an institution. Institutions are permanent. Permanence is an asset. Hence it is, that through the long years of active practice and theory the Greening Nursery Company have by the process of elimination reached the point where every step taken is on sure ground—they have built wisely and thus it is that the quality of the stock grown is so superior that it has no equal.



OUR HUMBLE BEGINNING

Their skill in growing comes from close study in the field plus the application of the accumulated experience gained by three generations in daily contact with and of this business alone. Theirs is no divided allegiance. Instead—their constant effort is to grow the best nursery stock in all America—to grow that which is worth while—to help make America more fruitful and more beautiful.

## FACILITIES

**Soil** We have emphasized the quality of the stock we grow in The Story of the Nursery on the preceding pages. It is true that skillful experience is necessary to produce such stock; but there are other essentials, the primary one being quality of soil. We now have 1530 acres devoted to the propagation of nursery stock. Our soil is the richest and most fertile sort of clay loam underlaid with a porous clay subsoil. Thousands of dollars have been expended in under-draining and improving it for the growing of the highest quality of nursery stock.

**Climate** Our climate, too, is one of our big assets. It is cool and healthy, and tempered by the breezes of Lake Erie, which lies east of our great farms. Such conditions as these never fail to produce perfectly hardy and healthy stock with clean, smooth, sturdy bodies and large fibrous roots. Our farm has been called one of the richest in America, and justly so, as the stock we grow proves.

**Labor** Having the soil and climate plus experienced management, there is yet another item that we are fortunate in having. This is experienced help. This results from keeping intelligent men the year round and offering them every advantage to stay with us at good wages. It wouldn't be possible to secure this help in the open market. Instead we have trained them—father and son—during these years, until our force of men are an asset in growing which cannot be over-estimated. Houses are provided for our men on our own land. Here they have real homes with gardens and everything that adds to comfortable living and contentment. This we do as an aid to retaining good men with a knowledge of the work so necessary to successful propagation.

**Budding and Grafting** It is in this that practical experience is worth more than tons of theory. Our men are famous in their line and the photographs of our force of expert budders and grafters proves that they can, and do their work with skill.



The single picture above is the late J. C. W. Greening, founder of The Greening Nursery in 1850.

At the top to right are Mrs. J. C. W. Greening (now deceased) and Mr. Geo. Bruckner in the old orchard which was planted by Mr. Greening, Sr., and Mr. Bruckner in the afternoon of the day they voted for Abraham Lincoln for President.

The next picture below shows four generations of the Greening family: Mrs. J. C. W. Greening, her son Charles E., his son Benjamin J., and his son Charles B., Jr. in the same old orchard which is yet bearing fruit.

The bottom picture is Charles E. Greening and his brother George when they succeeded their father in 1883.



Age is an asset in business. The continuance of ours in one family for three generations means that the policy adopted in the beginning and followed since its inception will be maintained, namely: "A continued patronage is our constant aim". Unswerving adherence to this policy through these many years has resulted in the largest retail nursery business in the world.



#### OUR NEW OFFICE BUILDING

A magnificent structure built of Red Velvet brick and trimmed with white Terra Cotta of classic design. This building has been pronounced the finest nursery office building in the world. The interior is finished in rich mahogany and plate glass partitions.

**Cultivation** Growing stock must be cultivated as carefully as can be. We aid our men by furnishing them every form of improved machinery so that they may take advantage of all favorable weather from the time the soil is broken until the stock is dug.

**Spraying** Nowadays the old style of "catch as catch can" in growing stock is obsolete. Each state provides for nursery inspection and nurserymen dare not, if they would, ship stock that isn't clean and free from all insect life and fungous diseases of whatever nature. The spraying outfit shown in these pages is the result of experience and was invented and improved under our personal supervision until we offer stock that is absolutely healthy.

**Digging** We grow every year millions of trees alone. When they have reached the proper age for transplanting, storage and sale, they must be dug. Years ago when trees were handled the old-fashioned way, many of the roots were bruised and broken in digging. This no longer obtains. We now dig by steam and tractor power. No roots are lost. Instead, as you will see by the photograph showing our improved digger, that we can and do furnish you with "trees you can trust" to grow, if you will do your part as well as we have done ours.

**Fumigating** The conditions which govern the nursery business make it imperative that stock planted in the middle-west must largely be planted in the spring. These conditions must be met by storage and in consequence to make assurance doubly sure, we fumigate every tree and shrub dug in the fall before we grade and store preparatory to the spring season. No nursery could handle its orders and do else. After the fumigating comes the grading and in no operation do we use more care.

**Grading** Each tree is handled. Every tree is examined by an expert. They are sorted as to grade and the business we have built is our most conclusive evidence that our trees deliver well—are up to specifications in every particular.





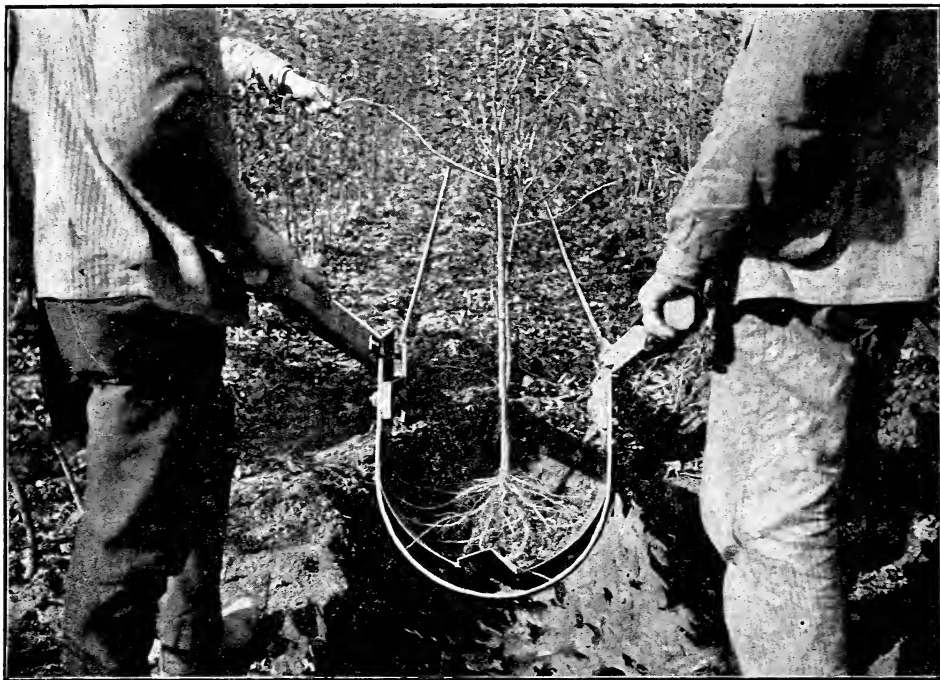
#### BUDDERS AND WRAPPERS

An aggregation of skilled workmen in the art of budding trees. A small army of active people selected from the most reliable, skilled and intelligent help at the nursery. With this force we are able to bud about 85,000 trees per day. The varieties are carefully guarded against mixture. Mr. Fred Duvall, our field foreman in charge of the budding, has been in our employ more than thirty years.

**Storing** When trees are graded they are packed in bundles of ten and twenty and stored preparatory to the spring shipping season. This requires cold storage cellars—proof alike to the extremes of heat and cold. The illustration of our storage cellars does not do justice to the vast areas they cover.

These huge storage buildings give an interesting example of modern genius in the storage and care of nursery stock. They are eight in number, built of quarried stone and represent an investment of large capital. Total area of storage room, 200,000 square feet, being the largest in the world; capacity, over thirty million trees and almost unlimited numbers of shrub plants. With the facilities we have for perfect storage, we are prepared to meet emergencies arising from shipping stock during the winter and late spring. Stock is handled and packed in these buildings without exposure to sun, wind or frost. The carelessness among nurserymen generally in handling trees and shrubs, if seen by planters, would prove a big surprise. Stock is handled too much like brush from the clearings. Is it any wonder that there are so many disappointed planters? Under our system of winter storage and packing we actually retain the perfect growing condition without deterioration in any form, from the time the plant is dug until the planter receives it ready for planting. A cold storage room to hold over stock for very late shipments is in connection with these buildings.

**Shipping** Our business is so vast that the New York Central R. R. built a spur connecting us direct to their main line running between Toledo, Ohio, and Detroit, Michigan. The New York Central R. R. system comprises in its entirety one of the two largest systems in the United States. In addition to this great system, we are also situated on the Grand Trunk, the Pennsylvania Lines west of Pittsburgh, the Michigan Central R. R. and the Pere Marquette Railway. We can ship the smallest bundle or by carload direct to any point with no lost motion as we are here right in the heart of the great middle-west with the center of population not over one hundred miles away. We also have fast Interurban Service to Toledo and Detroit; these afford us direct routes to many points.



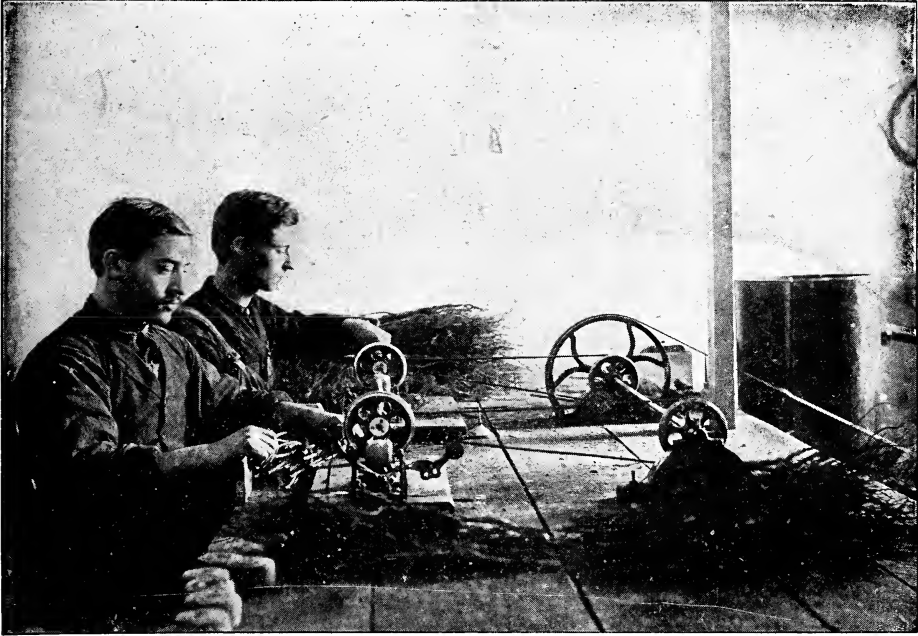
#### DIGGING TREES BY STEAM POWER—A SCIENTIFIC TRIUMPH

Progress is the watchword of the American people. This progressive spirit has manifested itself in the invention of a tree-digging machine, by means of which all kinds of trees, ranging in size from the dwarf-growing kinds up to large shade trees 15 and 20 feet high, may be dug without the slightest danger of bruising or injuring the roots. As shown in the illustration, the ground has been dug away directly back of the digger, exposing to view the steel blade and lifter of our modern tree-digger, running at the time under our mammoth block of whole-root apple trees at a depth of 30 inches. The cables drawing the digger run to pulley blocks stationed at the ends of the rows, thence on a rectangle to the machine operated by steam power. Do not such methods appeal to an intelligent people? With these facilities we are able to furnish trees with abundant masses of fibrous roots, such as will grow and make splendid orchards of strongest fruiting power.

**Packing** But before stock is shipped it must be packed. This is under the direct personal supervision of our Mr. George J. Schaeffer, who has had charge of this department for 26 years. Here it is that extreme care is needed. Our box shipments are invariably lined with strong paper made on purpose for us to use in this work. This paper is of a quality to protect the trees from drying out, being wind proof. Before packing, each tree and shrub is dipped into a thick puddle of clay before placing in the boxes or bales and they are then filled with plenty of moist packing material to insure safe delivery in good condition. A vast amount of nursery stock reaches its destination in a condition fit only for the brush heap, as the result of careless work and handling at the nursery. The rule of keeping the stock fresh and moist all the time under our care is strictly enforced. Our stock always arrives in good condition even if shipped across the continent. In point of careful handling and skillful packing our system is unsurpassed.

**Service** Our service doesn't end at the time the shipment is made. We are still concerned after it is delivered to the Railroad Company. We mail out a return postal card with each bill of lading which states the date the shipment should reach the consignee and to notify us at once if delivery is not made on the date stated. This informs us that the shipment is delayed in transit and we not only advise our local Freight Agent, but get into immediate touch with the General Freight Agent by phone or telegraph concerning it.

**Dixie Highway** Last but not least, since the Auto has come in such vast numbers is the Dixie Highway. Located midway between Detroit and Toledo on this great automobile route from the Great Lakes to the Gulf, and which is only second to the Lincoln Highway in length and popularity, we are daily serving many thousand buyers during the planting season. It is



#### UP-TO-DATE METHODS IN GRAFT WRAPPING

Here we show our latest graft wrapping machine, operated by a gasoline engine. Two wrapping machines are shown. One man with machine will wrap over 15,000 whole root grafts in a single day, more than three times as many as by hand, and the work is far superior to the old method in point of quality as it insures a better union of the graft.

The cost of production is so high that every effort must be made to increase the output providing it can be done with better eventual results. The view on this page shows what we do to lessen cost.

only a few hours run for many of our customers. The road is fine. The drive exhilarating. The benefits of the trip many. We invite everyone interested in trees, shrubs and flowers to drive to the nursery and see for themselves that we really do produce superior stock—that the claims we make are true.

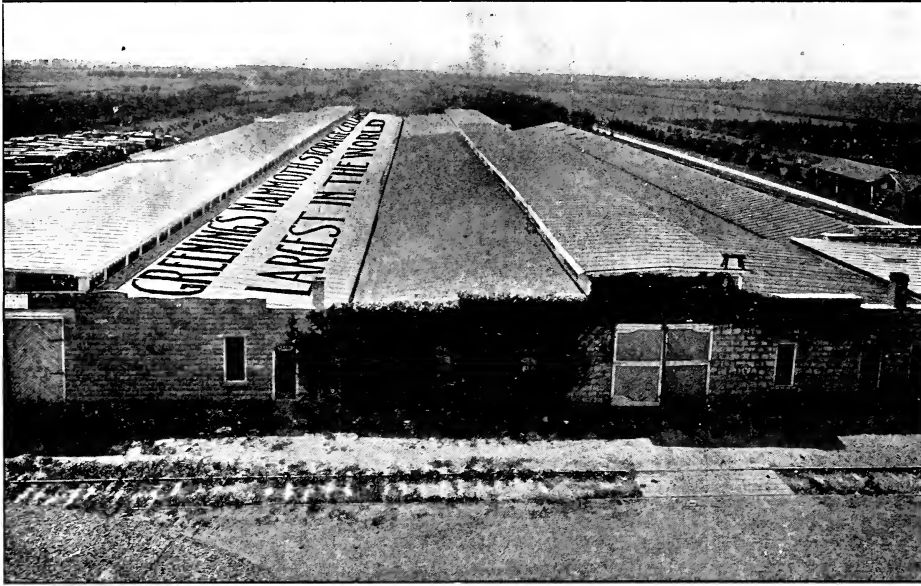


We just received strawberry and raspberry plants and thank you very much. When we have other orders to give you may be sure you will get them. I will always have a good word to speak for your nursery.—Gilbert Johnson, Ionia, Mich.

My stock has arrived and delivered and customers well pleased with stock.—Wm. Bussard, New Paris, Ind.

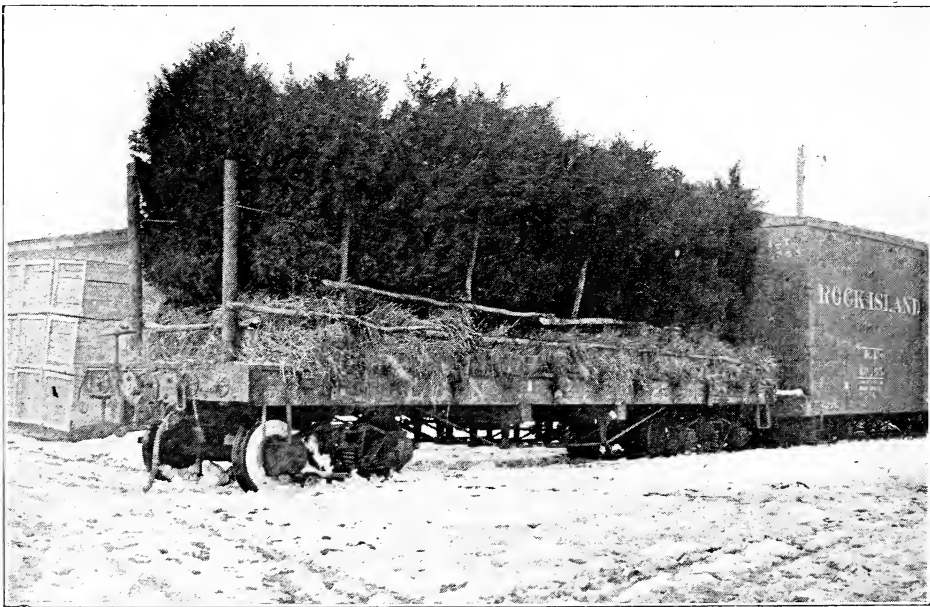
In regard to the stock shipped to me last spring, must say it was a fine bill of goods. Was surprised to see such large trees.—J. W. Phillips, Pemberville, Ohio.

Received strawberry plants all O. K. and they were very nice, all in fine condition.—Mrs. A. C. Green, Deerfield, Mich.



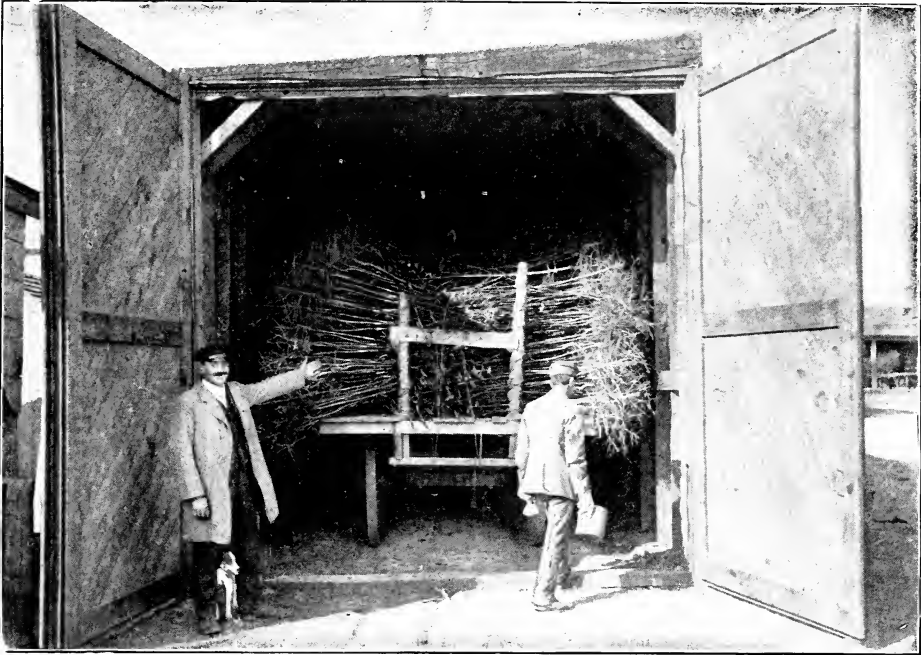
#### OUR MAMMOTH STORAGE CELLARS—LARGEST IN THE WORLD

Above; a partial view of our cellars. Note the railroad track in foreground. It is on this track that the car of Evergreens was standing when photograph below was taken. These views are shown merely to give you an idea of our ability to give you satisfactory service.



#### SHIPPING A CAR LOAD OF LARGE EVERGREENS FROM OUR NURSERIES

You will notice from the snow in the picture that these evergreens were shipped in winter. Certainly it can be done. Merely dig the tree with a frozen ball of earth. In the spring the tree will wake up and grow and will never realize that it has been moved.



**OUR FUMIGATING HOUSE  
TREES FREE FROM DISEASE AND INSECTS—FUMIGATION**

Pursuant to the requirements of the State law, we have built two large fumigating houses in which all stock is thoroughly fumigated with Cyanide of Potassium and Sulphuric Acid before shipment, as prescribed by law, which absolutely destroys all insects, also fungus in any form, without injury to the trees. A wagon load of steam-dug trees, showing large bunches of roots, has been brought into the fumigator, and our chemist is in the act of putting in the charge of chemicals previous to closing the air-tight doors.



**SHOWING THE ORDERLY WAY IN WHICH ORDERS ARE FILLED IN THE  
STORAGE CELLARS**

Trees placed in stalls, marked as to varieties. Easy to keep roots moist and conditioned.



The photograph above shows a three-year Winter Banana apple tree in the orchard of David McKane, Syracuse, Ind. There were 282 apples on the tree when photo was taken. When measured they made five bushels. We introduced this apple to the public in 1890.

## FOR AN AMERICA MORE FRUITFUL

From the very inception of our business we have made a constant study of how to propagate trees of high productivity, of hardiness, and which would bear fruit of superior quality.

**Scientific Research** To that end we maintain a department of scientific research. This department keeps a record of trees which have shown marked superiority in health, vigor, early and constant bearing, as well as production and quality of fruit. The fruit from these trees is carefully weighed each season and our records show surprising results among trees of the same variety in the same orchard in which the soil conditions and care do not vary.

Great results have been obtained through this practice by the Citrus fruit growers of California. And every live stock student is familiar with what has been accomplished in the breeding of live stock, especially among dairymen who use the Advanced Register of Merit system in breeding for high production.

We are constantly doing this in fruits and our records are proving that much is possible in propagating trees with scions cut from those which have shown consistent high production and other superior qualities.

Orchardists and horticulturists throughout the United States are beginning to recognize the Greening Nursery Company's advanced methods of propagation from pedigreed trees, which is nothing more or less than the well-known method of selection of the best parent stock. We continue to select our scions for budding and grafting from the best fruit-producing trees we can find—trees that have shown themselves to be those of outstanding merit in our records.





**THE FAMOUS ORIGINAL WINTER BANANA APPLE TREE AND ITS ILLUSTRIOUS ORIGINATOR, MR. D. M. FLORY**

Tree six and one-half feet in circumference three feet from ground, forty feet spread; thirty-eight years old.

The letters we receive from fruit growers commending us on the results we are getting, proves to us without shadow of doubt that we are following the right method, and to those who wish to plant commercial orchards our records are open. We will gladly show them and prove that our contentions are founded on fact—that Greening's pedigreed trees are true to name, are high producers bearing fruit of superior size color and other qualities desirable for market purposes.

### Possibilities in Fruit Growing

It has always been known that fruit has played an important part in the dietary of mankind. But not until the Great World War, which begun in 1914, was the need of fruit for health so emphasized. We are unable to give details here for lack of space, but refer those interested to our circular on "When to Plant an Orchard," "Our Message to Farmers," and other publications we issue. Suffice it to say, that our population is increasing much faster than production, therefore the prices of good fruit will be such that fruit growing is bound to be profitable.

Objection has been made that to plant an apple orchard or other fruits means a long-time investment before the fruit comes into bearing; but a commercial orchard of standard trees may be filled in with so-called "fillers" such as are mentioned below which will come into bearing from three to four years, producing many crops before the standard apples grow large enough to cover the ground. Thus a large profit may be made from the orchard before the apples come into bearing.

### Intercropping and the Use of Fillers

To plant an orchard of apples and wait for it to come into bearing for commercial purposes is one that few farmers or fruit growers care to undertake without receiving some returns from the land occupied and the labor and expense connected with it. This may be overcome by growing bush fruits, annual crops of early bearing or by the use of the varieties named below which are generally grown as fillers. But if fillers are planted, do it with a determination to remove them just as soon as they begin to crowd the other trees or when the



The cut above was made from a photo taken of the Peach orchard of Mr. J. H. Behnken, Somerset Center, Michigan, in 1916, just forty months after planting. We furnished the 2,000 trees necessary to plant this orchard, and of that number only one failed to grow. We offer this as evidence that our stock makes good. In propagating we use buds taken only from high-producing trees of quality fruit. Read pages 22 to 24 in this connection.

permanent or standard trees come into bearing. Also if the filler plan is adopted, you must make greater efforts to conserve the moisture and preserve the fertility of the soil.

Peaches and plums make good fillers in most localities. Pears should not be planted among apples where clean cultivation or mulch culture is practiced. Of the apples, Wagener, Grimes Golden, Duchess of Oldenburg, Wealthy, and Yellow Transparent are successfully used as fillers.

**Mixed Planting** Many varieties will not bear well when planted alone or in large blocks because some varieties of fruit are more or less self-sterile. They require the pollen of other varieties to fertilize and cause the setting of fruit. Inasmuch as all varieties benefit by cross-pollination, it is good practice to plant not more than four or five consecutive rows of one variety in a block.

**Self-Sterile Varieties** Of the apples which are more or less self-sterile are: Yellow Bellflower, Chenango, Gravenstein, Tompkin's King, Northern Spy, Primate, Roxbury Russet, Esopus, and Tolman Sweet.

**Self-Fertile Varieties** The apples which are mostly fertile are: Baldwin, Greenings, Duchess of Oldenburg, Red Astrachan, and Yellow Transparent.

PEARS more or less self-sterile: Angouleme, Anjou, Bartlett, Clairgeau, Clapp's Favorite, Howell, Keiffer, Lawrence, Louise Sheldon, and Winter Nellis.

PEARS generally self-fertile: Bosc and Seckel.

PLUMS more or less self-sterile: Golden Drop, Italian Prune and Satsuma.

PLUMS generally self-fertile: Burbank, Lombard, Damsons and Bradshaw.  
(For a more extended discussion of this subject see Bailey's Principles of Fruit Growing.)





Young peach orchard on the farm of James Boyce, Holland, Mich. Fruit-growers will appreciate the thrifty growth shown by the trees second year after planting. We furnished the stock.

### Distance for Planting

Apples should be planted from 32 to 40 feet apart each way. Most of our old orchards were planted too closely. When planted too closely they not only interfere with each other but also hinder spraying and cultivation. The variety will determine the proper distance to plant, the planter considering whether the variety is an upright or spreading grower: for example, the Northern Spy as compared with the Wagener.

### Low-Headed Trees

We make it a practice to ship only medium low-headed trees because they are more satisfactory in every way. Some of the advantages are that it costs only about half as much in labor and materials to spray them; then, too, there is a great saving of labor in pruning and thinning. The expense in picking is also greatly reduced. The injury to the limbs by wind storms is lessened because a low-headed tree has a stronger framework. A low-headed tree also suffers less from sun-scald and winter injury as there is less exposed surface of the trunk.

### The Site and Soil for an Orchard

In selecting a site for an orchard, the question of soil and location is of utmost importance. An elevated location having good surface and air drainage is preferable. Under-drainage is recommended on level ground for best results. Drainage makes the soil loose and warm.

### The Selection of Varieties

Before planting an orchard for commercial purposes, it is well to consult those with experience and knowledge of the subject. All our knowledge is at your service free of charge should you wish to consult us.

### The Best Trees to Plant

The best trees to plant irrespective of climate and location are those grown in a cool temperate climate. The most experienced nurserymen in this country concede that the soil we have in our nursery is the best in the United States for the propagation of nursery stock. In buying do not allow price considerations to enter as a few cents more per tree paid to a reliable nursery will mean many dollars profit when the trees you plant come into bearing. Bear in mind that not all varieties have straight, smooth trunks. This should be taken into consideration when you receive your stock.

### Care of Young Trees Before Planting

Immediately after receiving the trees or plants from the nursery they should be thoroughly soaked and wrapped and covered to prevent drying out. Take them home at once and heel-in without delay. If frozen, put in cool cellar where frost will gradually come out. To heel-in a trench should be dug at least 18 inches deep. Loosen the lower band on the bundle, wet the trees thoroughly and place them in the trench. Cover the roots and press the soil down firmly around them. All trees when heeled-in should be placed in the trench with tops leaning toward the south at an angle of 45 degrees. Soil should

be carefully placed around the roots to exclude all air and the trees well banked for protection. It is advisable to cover about two-thirds of the trees with soil. If to be heeled-in over winter select a place where water will not stand, away from buildings and meadows where mice will not injure them. Strawberries, raspberries and blackberries, if well dampened, can be kept in the cellar until ready to plant.

**Preparation of the Soil for an Orchard** Never plant trees in sod. Trees should be given a good start in their younger years. An orchard is planted for a lifetime. The soil should be prepared better than for ordinary crops. An orchard planted after a cultivated crop such as corn or potatoes will do best all things considered. Under-drainage of wet soils is absolutely necessary.

**Laying Out and Planting** After the soil is well prepared a hole should be dug sufficiently large in width and depth to admit the roots in their natural position with some loose earth in the bottom of the hole. Trees should be planted about two inches lower than they stood in the nursery. Place the tree in position; fill in fine mellow soil around the roots with the hand, arranging all the roots in their natural position, packing the soil firmly around them and under the crown. Do not press down on the tree to make it fit while planting.

Fill up the hole within two inches of the top and press down the earth with the foot being careful not to break or bend the roots. Then throw in about a gallon of water and fill up the hole level with loose soil, but do not tread upon the loose soil.

For spring planting level the soil around the tree after planting. In the fall bank up against the tree a little soil after planting and remove to a level in the spring.

*(continued page 17)*

## Salesmen

## Wanted

We want salesmen in all our unoccupied territory. We want men of good local reputation. We want men who can and will give their best energy to building up a permanent business and to such we offer our co-operation.

In planting trees after the stakes have been set a planting board will be found beneficial. Its use will enable the planter to keep his trees in exact line, which will render cultivation easier and make the orchard more sightly.

## The Use of the Planting Board

Fig. 1. The planting board is made from an inch board about 3 inches wide and 5 feet long. Cut shallow notches for stakes as shown. Round off corners for center notch. End notches must be equally distant from center notch.

Fig. 2. Planting board placed against center stake and then end stakes pushed down firmly into the ground at end notches. Always place the board on same side of rows of stakes.

Fig. 3. Remove planting board and center stake but do not disturb the end stakes. Place the tree directly over the center hole and in position you want it to set and make outline of hole large enough to let the tree enter the hole freely. Dig the hole deep enough to let the tree down about 2 inches deeper than it stood in the nursery but place dirt on opposite side of hole and not as shown in the drawing of Fig. 3.

Fig. 4. When hole is dug, put in the tree and then place board with notches to end stakes. The tree should come up straight at the center notch where the center stake stood. Keep tree at this notch and upright till hole is sufficiently filled in to hold tree in its place. Carry board and end stakes with you. End stakes should be prepared about 12 inches long, round, sharpened and smoothed to fit their notches.

Do not forget before planting that all broken roots or ragged ends should be cut off smoothly with a sharp knife so that when planted the cut surface will lie upon the bottom of the hole.

## Pruning When Planting

The training of young fruit trees from the time of planting up to the time of fruiting should be along the lines of developing a strong frame work consisting of 4 or 5 main lateral branches spirally arranged around the trunk at different points to avoid crotches. The main branches should be headed back each year to force them to become stocky and bear a large crop without breaking down.

APPLE trees may be trimmed back to about four well-developed branches properly distributed around the trunk and these branches cut off so that about three buds are left on each branch. Remove the lower buds as they will produce unnecessary branches.

PEACH trees unless very large, should have all branches removed and top cut off so as to be from two feet to thirty inches high according to size of tree.



Fig. 1 -- The planting board made from inch board 5 feet long, 3 inches wide. Cut notches for stakes.

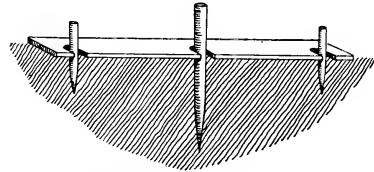


Fig. 2 -- Planting board and stakes placed in position before digging holes.

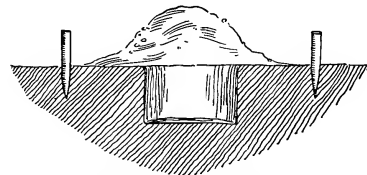


Fig. 3 -- Remove planting board and center stake, don't disturb the small stakes. Dig the hole.

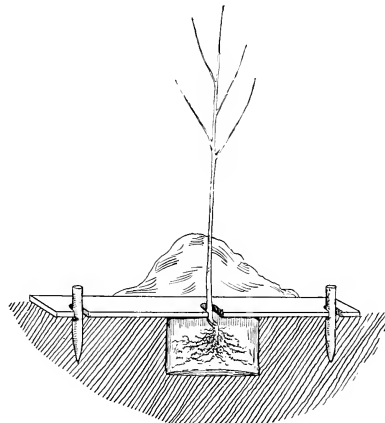


Figure 4

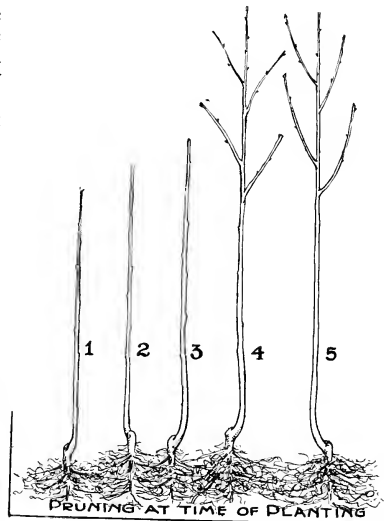
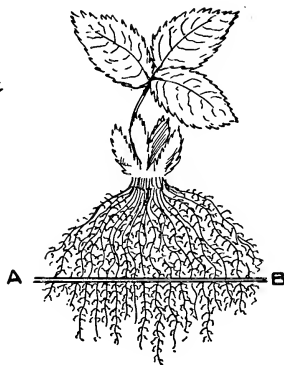


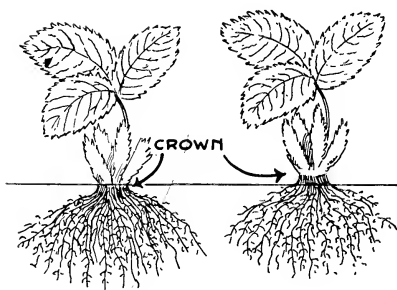
Fig. 1, Peach Tree. Fig. 2, One-Year Apple. Fig. 3, One-Year Cherry or Pear. Fig. 4, Two-Year Apple. Fig. 5, Two-Year Cherry or Pear.



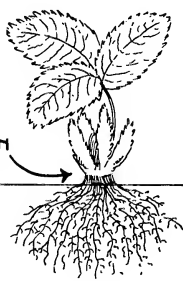
Before Planting



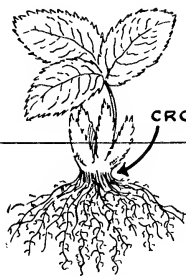
Prune Roots Before Planting



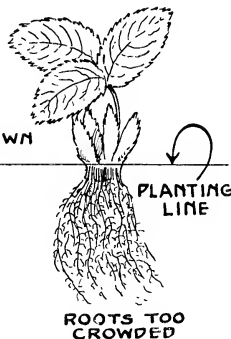
CORRECT



TOO HIGH



TOO DEEP

ROOTS TOO  
CROWDED

PLUM and CHERRY trees should be started with some of the natural limbs on. If these branches seem too long and slim, cut off the ends according to the growth of the tree. It is not well to prune cherry and plum back any more than to thin out and nip off the tips of remaining branches.

PEAR trees usually grow the top close together and should be thinned out on the inside and about three or four branches left. Remove any buds that will start undesired branches.

QUINCES are of a shrub nature and may be kept in a tree form if desired by leaving only one stem to grow upward. Cut back when planting if head is thick.

RASPBERRY and BLACKBERRY plants usually come to the planter cut off. The stock should be cut to about 12 or 16 inches long if not already done when received.

STRAWBERRY plants should have most of the leaf stems removed and root ends cut off when ready to plant. (See illustrations above.)

Cutting off ends of roots of all fruiting trees and plants invigorates new growth.

### Grapes

For proper distance apart at which to plant, see Planting Table shown elsewhere. Place the vine in hole so that the first bud next to the stem will come on a level next to the surface. After planting, trim the vine to two buds. A stake should be driven at each vine to support the canes the first two years.

### Small Fruits

See Planting Table for distance apart at which to plant. Plant all small fruits about one inch deeper than they stood in the nursery except strawberries. After planting cut back the tops to 4 or 5 inches from the ground.

### Ornamental Trees

Plant same as fruit trees except that larger holes must be dug to accommodate the roots. Two-thirds of the tops should be cut off on all ornamental trees except the Cut-leaved Birch and Horse Chestnut. These two varieties should not be headed-in.



#### NURSERY SPRAYING: A SCIENTIFIC TRIUMPH—OUR SPRAYING APPARATUS

During the process of our experiments and investigations for obtaining knowledge of causes and effects, our attention has centered on the scientific experiments in spraying to obtain two distinct results:

**First**—Spraying with a solution of lime and sulphate of copper for the purpose of preserving the foliage; in other words, to ward off all fungus diseases, and thus to stimulate the growing functions of trees and plants.

**Second**—To destroy the insects by adding arsenic poisons in prescribed quantities. Under this method we keep the trees in good growing condition during the entire summer season, thereby counteracting a weak and tender second growth, which is often the case when trees have stopped growing from some cause during the summer months.

**Evergreens** After planting soak the ground thoroughly and apply a thick covering of strawy manure or some other mulchy material over the surface of the ground around the tree to retain the moisture.

**Shrubby** Trim off all the ends of the roots and plant about two inches deeper than they stood in the nursery. After planting prune back all of the wood to ten or twelve inches of the ground. This will make them bushy. Where immediate effects are desired regardless of future beauty little pruning may answer the purpose.

**Roses** Insist that all roses you buy are field grown. Best soil is the clay loam. Set the plants four inches deeper than they stood in the nursery. All suckers growing out of the ground should be removed as soon as seen. All must be pruned more or less when planted. Do not neglect this. As a general rule, the more vigorous a variety the less it should be pruned. All weak or decayed wood should be entirely cut out, also any shoots that crowd or prevent light and air.

**Spraying** If fruit is to bring the highest market prices the trees must be sprayed. Spraying has come to be an established part of fruit growing. Every State Experiment Station, as well as the United States Department of Agriculture, issues bulletins on when and how to spray. But we are daily besieged by hundreds of people for directions about spraying and the matter which follows relating to it is condensed. We suggest that all customers of ours write their State Experiment Station for bulletins on this subject, because there is no demand for small, deformed wormy fruit, while clean, well-grown fruit always commands a good price. Absolutely A-1 fruit can not be grown without spraying. Spraying is not difficult. Good results can be secured with barrel and pump if the work is done thoroughly and everyone having an orchard will find a small outfit to be a good investment.

## LIME-SULPHUR

The Lime-Sulphur mixture is the standard remedy for the San Jose scale. We recommend that you get the commercial Lime-Sulphur; full directions go with it. Every gallon of the mixture makes about eleven gallons of solution when properly mixed with water. This will cost when mixed about one cent a gallon when used for scale and is better, all things considered, than trying to make your Lime-Sulphur at home. The dilutions for dormant and summer spraying of Lime-Sulphur mixtures are as follows:

## Dilutions for Dormant and Summer Spraying with Lime-Sulphur Mixtures

Degrees of Beaume	Reading of Hydrometer	Amount of Dilution Number of Gallons of Water to One Gallon of Lime-Sulphur Solution		
		For San Jose Scale	For Blister- Mite	For Summer Spraying of Apples
35.....		9	12½	45
34.....		8¾	12	43¼
33.....		8½	11½	41½
32.....		8	11	40
31.....		7½	10½	37¾
30.....		7¼	10	36¼
29.....		6¾	9½	34¾
28.....		6½	9	32¾
27.....		6	8½	31
26.....		5¾	8	29½
25.....		5¼	7½	27¾
24.....		5	7	26
23.....		4½	6½	24¼
22.....		4¼	6	22¾
21.....		3¾	5½	21¼
20.....		3½	5	19¾
19.....		3¼	4¾	18¾
18.....		3	4¼	17
17.....		2¾	4	16
16.....		2½	3¾	15
15.....		2¼	3½	14
14.....		2	3	12¾

## Directions for the Making of Self-Boiled Lime-Sulphur

This is a mechanical mixture of the two substances, and is really not boiled, the heat being supplied by the slaking lime. In a small barrel or keg place 8 pounds of good quicklime. Add water from time to time in just sufficient amounts to prevent burning. As soon as the lime begins to slake well, add slowly (preferably through a sieve) 8 pounds of sulphur flour. Stir constantly, and add water as needed. As soon as all bubbling has ceased, check further action by adding a quantity of cold water, or pour into a barrel or tank and make up to 50 gallons. Keep well-agitated. Very effective against peach scab and brown rot. Several other formulas have been used: 10-10-50 and 5-5-50. Arsenate of lead can be used with this mixture.

By using boiling water and allowing the hot mixture to stand for half an hour, a stronger spray mixture of the above can be secured. It cannot be used safely on peaches, but has been used successfully on grapes for surface mildew. The addition of sulphate of iron or sulphate of copper, one or two pounds to 50 gallons, has been used for apple rust. (L. H. Bailey's Farm and Garden Rule-Book.)

## ARSENATE OF LEAD

Arsenate of Lead.....	6 pounds
Water .....	100 gallons

It is better to purchase arsenate of lead than to attempt to make it. In mixing, preparatory to spraying, the amount of arsenate of lead for each spray tank full should be worked into a very thin paste having the appearance of milk of lime. It should never be thrown as a mass into the spray tank. This is a standard spray for codling moth and other eating insects.

**KEROSENE EMULSION**

Kerosene .....	2 gallons
Hard Soap (whale-oil soap).....	½ pound
Water .....	1 gallon

Dissolve soap in water by boiling; add hot suds to the kerosene. Do not do this near a fire. Agitate the mixture with a spray pump so as to emulsify the oil. After five minutes the mixture becomes creamy. To use, dilute the above stock solution at the rate of one gallon to ten gallons of water. This is a standard remedy for destroying green aphids, woolly aphids, mealy bugs and other plant lice. It may be used instead of tobacco solutions if desired.

**CORROSIVE SUBLIMATE**

(Bichloride of Mercury)

This is the standard disinfectant when working with Pear Blight. No other disinfectant should be used to wash the cut surfaces or to disinfect the pruning tools.

Corrosive Sublimate .....	1 part
Water .....	1000 parts

Corrosive sublimate may be purchased in tablet form at drug stores and directions for making solutions will be found on the container. Never put corrosive sublimate into a metallic container; always use a glass bottle. Be sure to label the bottle "Poison" in large, plain letters. It is the deadliest of poisons.

**WHITEWASHES****1. Government Whitewash.**

Lime (unslaked) .....	40 pounds
Salt .....	15 pounds
Rice Flour (or ground rice).....	3 pounds
Spanish Whiting .....	½ pound
Glue .....	1 pound
Water .....	5 gallons

Slake the lime in warm water and cover so as to keep in the steam; strain through a fine sieve or strainer; add the salt, well dissolved in warm water. Then add the rice boiled hot; the Spanish Whiting; and finally the glue, which has been previously dissolved over a slow fire. Lastly add the five gallons of hot water. Stir well and let stand for a few days. Apply hot with a brush. One pint of the mixture will cover a square yard. Coloring matter may be put in, such as Spanish brown, yellow ochre, etc.

**SPRAY CALENDAR**

What to Spray For	Spray to Use	REMARKS
San Jose Scale Scurfy Scale Bud Moth Eggs of Apple Aphid Eggs of Red Spider Green Peach Aphid Oyster Shell Scale Peach Leaf Curl Pear Leaf Blister Mite	Lime-Sulphur Winter Strength	Apply while buds are swelling to Apples, Pears, Peaches, Plums and Cherries and small fruits, using the winter strength lime - sulphur, drenching all parts of the tree. Test both the commercial and home-made lime-sulphur with hydrometer before using to secure the correct strength. The tree must be completely covered with winter strength lime-sulphur when spraying for scale insects. Coat every portion from ground to tip of twigs.
Strawberry Leaf Blight	Lime-Sulphur Summer Strength	Apply when new leaves start. Repeat every 10-15 days until flowers appear. Burn leaves as soon as crop is harvested.
Thrips	Nicotine Ext. (40%) ¾ pint Water, 100 gals. Soap, 2 to 5 lbs.	The period for effective spraying against adult thrips is during the time when the buds are swollen and partly open, and until they are entirely open at the tips. Spray for the larvae after the petals drop to reduce the numbers of insects for the following year.

## SPRAY CALENDAR (Continued)

What to Spray For	Spray to Use	REMARKS
Apple Scab Black Rot of Apple Brown Rot of Prune Bud Moth Caterpillars Codling Moth	Lime-Sulphur Summer strength and Arsenate of Lead 3 lbs. to 50 gallons	<p>First application. Just before blossoms open, for apple scab and various leaf-eating insects, use lime-Sulphur solution (32° Beaumé) diluted with forty parts of water, with two to three pounds arsenate of lead to forty gallons. May be omitted if insects are few and weather is dry.</p> <p>Second application. When blossoms are about two-thirds off, give same treatment as (2). This is the most important spraying for apple scab and codling moth. Should never be omitted.</p> <p>Third application. About two weeks later repeat (2) if weather is favorable for apple scab; that is, moist and warm.</p> <p>Fourth application. About first week in August repeat (2) to prevent late infections of apple scab and to control second brood of codling moth.</p> <p style="text-align: center;"><b>PEARS</b></p> <p>Spray as for apples. As foliage appears to be more susceptible to injuries by the spraying mixture, dilute concentrated lime-sulphur solution (32° B.) in the proportion of 1 to 50 and apply the liquid in minimum quantities, using nozzles with fine apertures.</p>
Canker (Apple) Mildew, Apple Scab, Apple and Pear	Lime-Sulphur Summer strength	See Arsenate of Lead for combination spray.
Grape Rot and Anthracnose	Bordeaux Mixture 5-5-50 formula	<p>Apply when leaves are half grown; just before blossoming; when fruit has set.</p> <p>Repeat once or twice at intervals of two weeks. If later applications are necessary, use ammoniacal copper carbonate solution.</p>
Aphis on fruit trees on garden crops Leaf Hopper Oyster Shell Bark Louse Red Spider Woolly Aphis on Branches	Kerosene Emulsion or Tobacco Black Leaf	<p>These are contact insecticides and should be applied to exposed and tender bodies of young. These are all sucking insects and food poisons are of little value.</p> <p>Be sure to penetrate covering of woolly aphis; be thorough, do not allow any to escape.</p>
Peach Brown Rot Peach Scab	Lime-Sulphur Self-boiled 8-8-50	Spray four weeks after blossoms have fallen, again in three weeks and about one month before fruit ripens.
Apple Cankers Aphis Eggs Pear Leaf Blister Mite Red Spider Eggs Tent Caterpillar Eggs Woolly Aphis	Lime-Sulphur Winter strength	Spraying in spring before buds open may be substituted for this for combating insects and fungus pests. However, it may be desirable to apply in fall on account of rabbits.



## SPRAY CALENDAR (Continued)

What to Spray For	Spray to Use	REMARKS
Plum Curculio	Arsenate of Lead	<p><b>PLUMS</b></p> <p>First application. When "husks" or calyxes drop, spray with arsenate of lead, 3 lbs. to 50 gal. of water for the curculio. For leaf spot on European varieties use bordeaux mixture 5-5-50 with arsenate of lead.</p> <p>Second application. For leaf spot repeat spraying with bordeaux mixture about ten days later.</p> <p>Spray Japanese varieties of plums as directed for peaches.</p> <p><b>CHERRIES</b></p> <p>Spray as for plums for San Jose scale and the curculio.</p> <p><b>PEACHES</b></p> <p>First application. When "husks" or calyxes are dropping use two pounds of arsenate of lead to fifty gallons of water for the curculio. The self-boiled lime-sulphur mixture may be used as carrier of the poison to control also brown rot and scab.</p> <p>Second application. Two or three weeks later use 8-8-50 self-boiled lime-sulphur mixture and two pounds of arsenate of lead.</p> <p>Third application. About one month before fruit ripens repeat treatment with self-boiled mixture, omitting the poison.</p> <p><b>Caution:</b> Do not use lime-sulphur solution either winter or summer strength on Peach trees when in foliage.</p>
Raspberry Cane Blight	Resin-Bordeaux	Apply just after leaves have fallen.
Grape Mildew	Flowers of Sulphur	For mildew on grape use finely pulverized sulphur. Dust the ground and vines freely during a warm, bright morning when the slightest attack of mildew is suspected. This should not be applied while the weather is damp or the vines wet.
Crown Gall Fire Blight Raspberry Cane Blight Strawberry Crown and Root Borers Leaf Rollers	Destroy infected parts See notes	<p>Crown Gall is a bacterial disease of root or crown of trees. All infected trees should be destroyed. Keep a constant lookout for this trouble.</p> <p>Fire Blight Bacteria may extend below discolored or blackened region, hence cut should be made about one foot below. Disinfect knife and wound with mercuric bichloride one part to 1000 parts of water.</p> <p>Strawberry plants should be dug up and burned before May 1 to destroy insects before beetles escape to lay eggs.</p> <p>For strawberry leaf roller burn top as soon as crop is gathered.</p>



#### PEACH TREES AS WE GROW THEM

The photo reproduced above shows a portion of a block containing 2,000,000 trees. The seedlings were grown from Tennessee Natural Peach Pits and the buds taken from trees of unusual merit. This photograph was taken after three months' growth and is shown here to give you an idea of the extent of our business. You are cordially invited to visit us and see for yourself just what our facilities are to care for your needs.

#### SPRAY CALENDAR (Concluded)

What to Spray For	Spray to Use	Band trees with tanglefoot or strips of raw cotton, binding it in the middle, leaving band loose above or below. Do not apply sticky preparation directly on bark of trees. Use bands during June, July and August. Remove egg clusters which appear in masses as a white froth.
Tussock Moth	Band Trees	

#### Distances for Planting

Apples .....32 to 40 feet apart	Quinces .....10 to 16 feet apart
Pears, Standard.....18 to 20 feet apart	Grapes ..... 6 to 8 feet apart
Pears, Dwarf .....10 to 15 feet apart	Gooseberries & Currants..4x6 feet apart
Sweet Cherries .....20 to 25 feet apart	Raspberries, Red.....2x7 feet apart
Sour Cherries .....18 to 20 feet apart	Raspberries, Black.....3x7 feet apart
Plums .....18 to 20 feet apart	Blackberries .....2x7 feet apart
Peaches .....18 to 20 feet apart	Dewberries .....3x7 feet apart
Apricots .....18 to 20 feet apart	Strawberries .....1x4 feet apart

#### Number of Trees and Plants to an Acre

At 4 feet apart each way.....2723	At 18 feet apart each way..... 134
At 5 feet apart each way.....1742	At 20 feet apart each way..... 108
At 6 feet apart each way.....1210	At 25 feet apart each way..... 70
At 8 feet apart each way..... 681	At 30 feet apart each way..... 50
At 10 feet apart each way..... 435	At 32 feet apart each way..... 40
At 12 feet apart each way..... 302	At 40 feet apart each way..... 27
At 16 feet apart each way..... 170	At 45 feet apart each way..... 22



A good example of a low-headed tree in bearing. The picker can stand on the ground and pick the greater part of the tree without the aid of a ladder. The quality of the fruit is also better because of the better care which is so easily possible.

## LOW VERSUS HIGH-HEADED TREES

The cost of production enters into or should enter into fruit growing as well as in any other business. Pruning, spraying and picking take time and cost money. Our Mr. Chas. E. Greening has been an active student of practical fruit growing all his life. He has traveled much and observed the best orchards in this country and in Europe. For years he has been advocating the low headed tree and our stock is all low or medium headed.

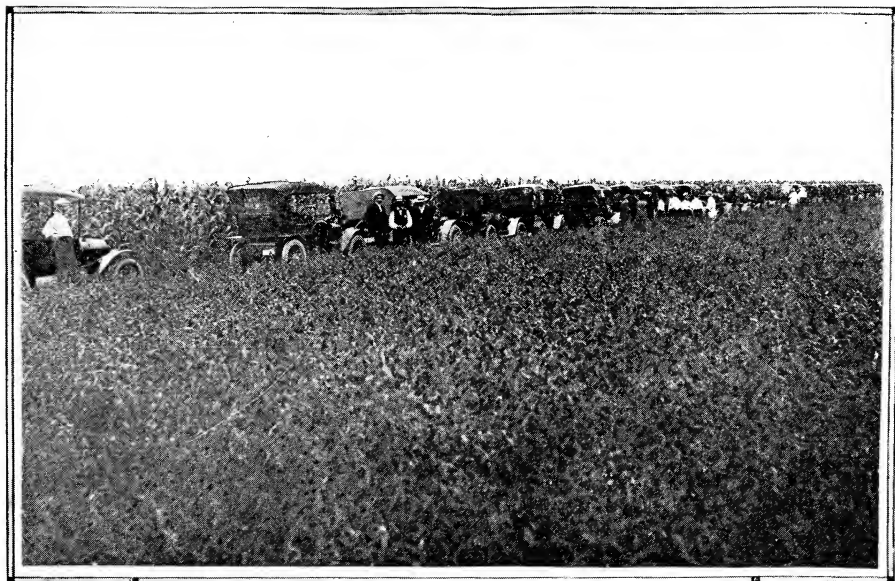
We practice this plan because we are students of Pomology or the Science of Fruit Growing. We are familiar with every orchard operation from the time of planting the tree until it comes into bearing and during its bearing life. Because of this interest, we keep in close touch with all work done by the Experiment Stations and all experimental work in fruit growing by others in this country and the knowledge gained by this study, observation and experience induces us to recommend from every angle low or medium headed trees to orchardists everywhere.

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J. W. Cleaver, of Northville, Michigan, says in a letter dated March 4th, 1919: "The top-worked Steele's Red I bought from you came into bearing in five years. All perfect apples. I planted six acres of them in 1913—another six acres in 1914. I find when you have Steele's Red to sell you don't have to look for a buyer—buyers come to you and the prices they offer are higher than for any other variety."

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John H. Dreffein, of Oak Park, Ill., says under date of Dec. 9th, 1918: "Five years ago I set out quite a few Winter Banana and Steele's Red and wish to report they are doing fine. I had Steele's Red bearing from two to fifteen apples five years from date of planting."



Oakland County Horticultural Society visiting our Nurseries



#### "TREES YOU CAN TRUST"

It is fruit like that shown above which proves the worth of our stock. The above was gathered from five-year-old trees on the farm of Mr. A. L. Ross, Rochester, Mich. The stock for his orchard was grown and furnished him by us.

### DOUBLE-GRAFTED STOCK

Some excellent varieties of fruit unfortunately inherit undesirable characteristics. These may be slowness of bearing, scraggly growth or tendency to collar rot. A few of these fruits are too valuable to discontinue and nurserymen have studied ways to circumvent nature or the natural characteristics of the tree and have succeeded in doing so by using the double-grafting or top-worked method in propagating these varieties of apples and pears for the fruit grower. The cut at left shows the graft and how completely union has taken place between scion and stock.

Of apples the two varieties which should be double-grafted for best results are Steele's Red and Grimes Golden. Of pears: The Bosc.

The reasons why we double-graft these varieties is explained below. The quality of each deserve that they be perpetuated because they have no superior among apples or pears in their type, purpose and character.

#### Steele's Red (Sometimes Called Canada Red or Red Canada)

brings from one to two dollars more per barrel than other winter varieties. But on account of its poor and feeble growth this variety has generally been discarded from the list of profitable fruits.

Every fruit grower knows that this variety is one of the very choicest and most valuable variety of winter apples. Because of its beautiful, rich red color, its excellent quality and its wonderful keeping and shipping qualities. It

By double-grafting Steele's Red on the stem of the Gideon (considered to be the most vigorous grower and hardiest of all apples) and the use of the French Crab root as a foundation all weakness of growth has been eliminated.



THE GRAFT



#### TOP-WORKED BOSCH PEAR ORCHARD

A photograph of an orchard of top-worked Bosc pears on the farm of Mr. G. W. Griffin at South Haven, Michigan. This orchard has long been the attraction of many horticulturists from far and near, and enjoys the reputation of being the most profitable fruit orchard in the entire Western Michigan fruit belt. Unlike other varieties of pears, this orchard of Bosc's yield a heavy crop regularly each year. When you plant an orchard of Greening's Top-worked Bosc Pears you have one of the greatest assets any farm can possess.

**Grimes Golden** The weakness of Grimes Golden is its susceptibility to collar rot. This tendency is more serious with this variety than any other, hence the tree bred as usual is short-lived. We overcome this defect by the double-grafting process. The trunk of this variety is also subject to sun-scald when grown as usual but by double-grafting we secure a tree that is free from every fault and as long-lived as any.

Any one having a desirable strain of fruit can have them double-grafted by us provided arrangements are made in proper time for the shipment of the scions. One hundred trees is the minimum number we can contract to double-graft.

**Bosc Pear** Among pears the Bosc is known as a notoriously slow grower but by double-grafting we have been able to produce a strong, thrifty and productive tree. The quality of the Bosc pear is undisputed as the most delicious of any pear grown for dessert purposes and a Bosc orchard of double-grafted trees will bring the very highest prices in the commercial markets. The photograph shown above of a double-grafted Bosc orchard on the farm of Mr. G. W. Griffin at South Haven, Michigan, shows an orchard which has long been the attraction of many horticulturists. This orchard enjoys the reputation of being the most profitable in the entire Michigan fruit belt. These trees were supplied by us.



Trees came in good condition and must say they are very nice trees.—Herman Adler, Elberta, Mich.

Trees arrived this A. M. and if they grow as well as they look I will be well satisfied.—F. H. Albright, Benton Harbor, Mich.

My trees all grew and are the best I have had for some time.—Julius Christeleit, Volga, Iowa.

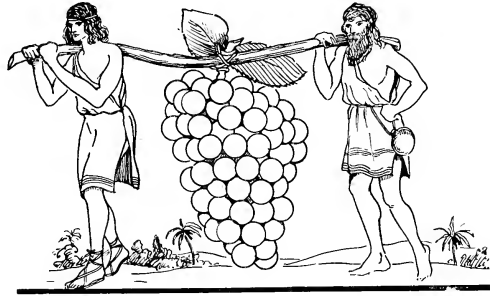


## TRICKS OF THE NURSERY TRADE

In the 13th chapter of Numbers, 21st and 23rd verses, we find this:

*"So they went up, and searched the land, from the wilderness of Zin unto Rehob, as men come to Hamath.*

*"And they came unto the brook of Eschol, and cut down from there a branch with one cluster of grapes, and they bore it between two upon a staff, and they brought of the pomegranates, and of the figs."*



When a boy, we remember reading one of Mark Twains earlier essays in which reference was made to the above quotation, and that the illustrators of various books found in Sunday School Libraries drew upon their imagination in making the grapes, carried on the staff as mentioned above, reach from the shoulder to the ground.

Being inquisitive as most boys, we asked our Sunday School teacher, after reading the essay referred to, if the bunches of grapes were really that large and the good soul answered that it was understood that grapes grew larger in the ancient bible days!

Possibly the illustrator may have made the drawings for some of the earlier "original originators" of so-called novelties? At any rate, it would appear that the illustration referred to was the first exaggeration in the fruit line known to history.

But now an attempt is being made by the better nurseries of America to eliminate the dishonest nurserymen of whom unfortunately we have had too many. It would seem that a trickster follows the adage that "a sucker is born every minute" and in his exploitations of worthless stock, he figures he can offer something new each recurring season and get away with it.

There have been and still are many fake novelties introduced. It is regrettable that some nurseries still try to do business on that basis. New names are given to old worthless varieties—glowing descriptions are printed which are illustrated with almost miraculous pictures designed to attract those who do not know.

We are daily in receipt of letters in which the writers ask for fruit the names of which we never heard of. On investigation we find the variety wanted is one of the highly colored standard sorts that have been "boomed" by dealers in nursery stock because novelties and colored plates sell stock if pushed to buyers who are willing to take a chance. This works a hardship on reputable nurserymen who confine their efforts to worth-while sorts or new varieties which are really good.

Another trick is to sell hedge plants 2 to 3 feet in height and then fill orders with smaller sized stock with ends of branches clipped tagging the bundle; "trimmed and ready for planting."

Another is the practice of cutting back wild peach seedlings while young close to the ground thus causing them to sprout and give them the appearance of budded stock.

In the course of a days business we have applications from men who can never sell in any territory they have previously worked in. This is evidence that they have not been square with their customers in some way and we do not want them in our employ.

Because of the "tricks" used by "dealers" who semi-annually used to call and bid for our "culled" stock we refused to sell them and burn it rather than allow stock of that nature to go on the market.

These things have obtained in the nursery business because it has been easy to do so but the reputable nurserymen of the United States have an association and have pledged themselves to "cleanse their stables"—to offer the public this trade-mark which will be a guarantee to the buyer that the stock shipped by any firm entitled to use this trade-mark is to be relied upon. It is analogous to the practice of those manufacturers who stamp their name on their product. We have been members of this association since it was inaugurated



but we have never needed an association to teach us the fundamentals of business. Since the inception of our company, our policy has been to ship our customers the stock they ordered and not to substitute. Whatever success we have attained has been by following that practice.

Beginning with nothing in 1850 we are at the present time one of the largest nurseries and our growth has continued simply by being absolutely square with our customers in every particular. It is on this basis that we solicit your business because we learned long ago that satisfaction is the primary essential to success which led us to adopt this motto: "A continued patronage is our constant aim."

## YOUR INSURANCE OF A "SQUARE DEAL"

### The New Nursery Law

Under a recent enactment of the Michigan Legislature, all nurseries within the State are required to have their nurseries inspected at least once each year by a State Inspector, whose office has been created under this law, and who is authorized to issue a certificate to nurseries found free from scale or other injurious insects or diseases. The law also provides that all Agents, Dealers and Nurserymen engaged in selling nursery stock in this State must have a "State License." It also provides that each and every package containing trees or plants of any kind must have a certificate of inspection attached. Planters are requested to report all violations of said law to the Nursery Inspector at Agricultural College, Michigan. All nursery stock must also be thoroughly fumigated before shipment, in accordance with the law relating thereto.

#### STATE OF MICHIGAN

#### STATE BOARD OF AGRICULTURE

#### Office of State Inspector Of Nurseries And Orchards

THIS IS TO CERTIFY THAT THE GREENING NURSERY CO.,  
of Monroe, State of Michigan,

having presented a satisfactory certificate of inspection, showing that its nursery stock is apparently free from dangerously contagious diseases, and having paid a license fee and given a bond in accordance with the terms of Act 91, Laws of 1905, of the Legislature of the State of Michigan, has received a license to sell nursery stock, by agents or otherwise, in the State of Michigan, during the year ending,

L. R. TAFT,

State Inspector of Nurseries and Orchards.

#### TO WHOM IT MAY CONCERN.

The bearer of this Certificate, Mr..... is  
our accredited agent, and is hereby empowered to take orders for  
nursery stock to be furnished from our nursery, upon the terms and  
at the prices set forth in our catalogues and price lists.

Dated..... (Signed).....

Buyers of nursery stock should insist for their own protection, that all salesmen who say they represent us produce an original of the above which is furnished all our bonafide agents.

#### OUR GUARANTEE

All our stock is guaranteed to be first-class according to grade ordered. In filling orders we exercise the greatest care to have our stock true to label. However, should a mistake happen we will either replace the stock or refund the money after receiving sufficient proof of same. Parties placing orders with us must do so with the understanding that, **we shall not be liable for damages** in such case further than the replacing of all stock proven untrue to name, or refunding money. Do not make a complaint unless you are sure there is a mistake.



## FRUIT DEPARTMENT

### THE WINTER BANANA APPLE

Highest Honorable Mention American Pomological Society, Fruit Exhibition At Philadelphia, 1889.

Introduced by us in 1890.

The Winter Banana apple is now known to every fruit grower and nearly all fruit users in America. Among the many varieties of apples there are few equals and no superiors to this wonderful fruit. We knew this when we first tasted this delicious apple. At that time Mr. Greening pronounced it the most beautiful and delicious apple that he had ever eaten or seen. This does not need to be proven to those who have grown or tested it. Merely to taste it is to be convinced. The Winter Banana is in a class distinctively its own. We want every lover of apples to know about it. We want you to know about it and we feel that so long as there is one home orchard without it, we shall continue to place its merits before the growers and lovers of fine fruits.

**History of the Winter Banana** In the early eighties Mr. David Flory of Adams-borough, Indiana, planted an orchard of fifty apple trees. These he calculated to raise from seed, with the object in view of top-grafting them later on. Among these he discovered one that bore fruit four years after planting. The fruit was different from any that Mr. Flory had ever seen, and immediately attracted his attention. During an exceptionally cold winter, nearly every apple tree in his orchard was winter killed, but this particular tree stood the test with no injury whatever. Mr. Flory named it the Winter Banana, on account of its wonderfully delicious flavor and aroma. The Winter Banana became noted first by these distinctions.

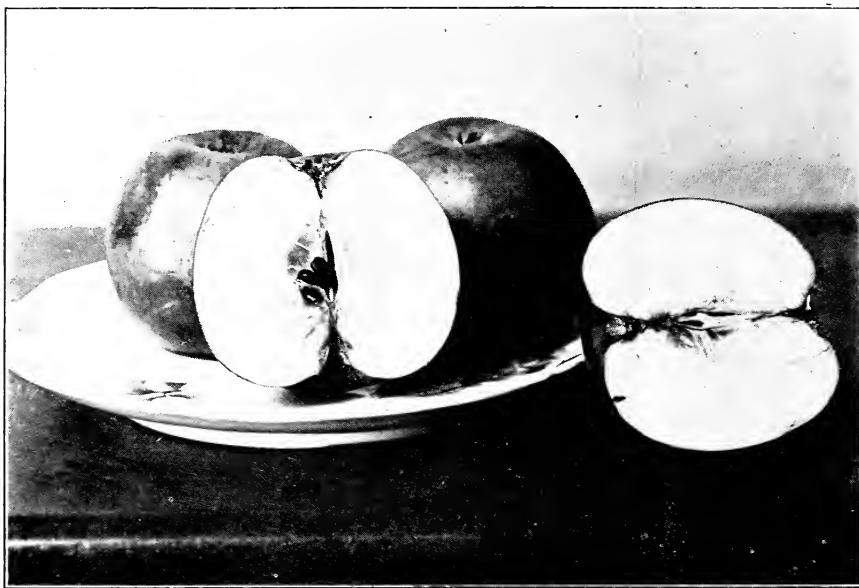
**In the Year 1890** The Greening Nursery Company purchased the exclusive right to propagate the Winter Banana. Our prophecy at that time was that it would become a standard market apple. This prophecy has been most liberally fulfilled. Today we have a new and larger vision of its possibilities, which is based on its present popularity. We believe it is destined to be the best known and most widely grown of any apple in the world.

### An Apple of Distinctive Flavor

There is no apple like it. Its striking beauty, its great size and marvelously perfect shape attract immediate attention. Its distinctive coloring of golden yellow, shaded by a beautiful bright red, cannot be equalled. But



A BRANCH OF WINTER BANANAS  
(Reduced Two-thirds)



Picture of Dr. Gerow's Winter Banana Apples, which kept an entire year in an ordinary cellar, told about in the accompanying story.

the taste—ah, that's the thing—a delicious, spicy and sub-acid combination distinguish it from any other apple ever grown. To taste it is to be won by it. Many of the best hotels specify this variety for use on the table. They are often seen in restaurant windows as specimens of the baked apples that are served within.

### Wonderful Keeping Qualities

selves so proudly. As I stated before, these apples were kept in an ordinary cellar belonging to my foreman, in the orchard of George H. Goodwin. I shall try and send another sample on Sept. 1st.

Cheboygan, Mich., Aug. 5th, 1919.  
Gentlemen: I send by this mail three Winter Banana Apples grown on your trees. I should think it would make you feel chesty to see your trees doing them-

Yours very truly,

A. M. GEROW.

Did you ever pick an apple off the tree, pack it away on a shelf in the cellar and then go down a year afterwards, and find it is fresh and rosy and full of flavor and fit for the table? Dr. Gerow did this with the Winter Banana.

### It Is Advertised by Its Loving Friends

Neither Dr. Gerow nor the Greening Nursery Company are the only friends of this wonderful apple. Read what others say:

MR. C. H. WHITTUM, of Eaton Rapids, Mich., names the "Winter Banana as his best variety."

THE WALDORF, New York City's famous hotel, writes us: "The flavor of the Winter Banana and its quality are superb."

DR. L. H. BAILEY, of Cornell University, writes us: "The quality of the Winter Banana is very excellent, and it has a spicy aroma which I like very much. It certainly is a valuable variety."

D. W. LEE asks the American Poultry Journal, July, 1918, as follows: "A friend of mine has a nine-year-old Winter Banana apple tree. He got four barrels of apples from it this year and sold them for \$16.00 per barrel. Are they good apples? I was going to make my leader Delicious, but when Winter Banana apples bring \$3.00 more per barrel than Delicious, it sets me guessing."

THOS. J. RIGGS, Horticulturist of the Iowa Experiment Station, answers him as follows: "The Banana apple is one of the best you can plant. In fact, it is, in my judgment, the most profitable apple in your State. I think that an orchard of Winter Banana and Delicious would be a gold mine."

E. E. WHITNEY, of Hillsdale, Michigan, says in a letter dated October 2nd, 1918: "I am sending you two photographs of Banana apple trees. The first tree bore fifteen bushels of first-class fruit in 1916 and I have just picked seventeen and one-half bushels of fruit from it this year. Jonathan tree, same age, only produced eight bushels. I planted this orchard for fruit for home use, but two crops have paid investment, care, labor, etc."

### What We Think

The Greening Nursery Company grow all leading varieties of apple trees, but there are none in our estimation which will give as complete satisfaction to our customers as the Winter Banana. You owe it to yourself to give it a trial.

## GREENING'S PEDIGREED TREES

There was once some difference, of opinion among horticulturists as to whether stock propagated by using scions cut from trees which were high-producing annual bearers, etc., would follow the law of "like produces like" but we are convinced from our observation and records that it will.

For some years we have maintained this department and are continuing the work. We are pleased at this time to have the endorsement of the United States Department of Agriculture and all the State Experiment Stations, they agreeing that there is a difference in strains of fruit of the same variety and that varieties can be greatly improved by careful bud selection. The results obtained in the breeding of plants all go to prove that there are great possibilities in this method.

For centuries domestic animals have been improved for certain purposes by selecting suitable parent specimens. This method of selecting the best was the beginning of all pedigreed stock. The results were so favorable that students of Botany conceived of a deeper and more obscure task—that of pedigreed vegetable propagation. This required years of careful observation and study and the results of their scientific application was effected. When the habits and fertilization of useful plants and trees became better known the work progressed more freely and now it is more common to hear of pedigreed animals, pedigreed grains, pedigreed plants and—pedigreed trees. No one questions at this time the propriety of breeding horses, cattle and other stock from pedigreed strains. No one at this time doubts the established pedigreed grains that have displaced the old varieties and none dare question the purpose or results of Luther Burbank in his many scientific transformations of plant life. We give below extracts from the last United States Agricultural Year Book to show the faith the Agricultural Experiment Stations have in pedigreed propagation by selection. They read as follows:

"Pedigreed Barleys have been disseminated through the Wisconsin Experiment Station. The yield of a pedigreed strain on the station farm is reported as 76 bushels per acre."

"As a result of several seasons work at the South Dakota Station, Hybrid Sugar Beets have not given as good results as those developed from a process of straight selection from known mother beets."

"In the sugar beet breeding by the Utah Station, strict methods of pedigreed selection are employed. The seed produced in this way in one year showed a gain of over one and a half per cent over the original seed."

"At the Ohio Station pedigreed strains of corn have been developed which are yielding five to fourteen bushels more than the original varieties. Pedigreed strains of oats and wheat are yielding three to six bushels more than the original stock."

The above from the Year Book issued by the United States Department of Agriculture.

In addition Mr. J. C. Whitten, Professor of Pomology in the University of California, in summing up his remarks on pedigreed trees says: "I see no reason why certain high-producing trees might prove to be variations which might transmit their high-producing character through scions selected from them."



A PEDIGREED TREE

Mr. O. K. White, Field Agent of Horticulture for the Michigan Agricultural College, on writing his suggestion for planting orchards says. "There is doubtless considerable advantage to the orchardist in furnishing the nurserymen with scions or buds secured from trees of known productiveness, hardiness and health."

Mr. George Roeding, who owns large orchards and is president of a large nursery company of California, writes in the Fancher Creek Nursery Catalog as follows: "To have nursery stock true to name is what every nurseryman aspires to but he has other duties. Among these may be mentioned the securing of buds, cuttings and scions from trees which are not only thrifty but which are recognized for producing fruit of the very best quality."



MR. ROY E. GIBSON

Mr. W. H. Chandler, Professor of Pomology at the New York State College of Agriculture doesn't believe in pedigreed trees but says: "If you find a tree that is outstandingly good the fruit of which has better color or something of that kind it is well worth propagating from it."

In a letter to this company from Mr. C. P. Halligan, Professor of Horticulture in the Michigan Agricultural College, than whom there is no better authority, says: "I have had the pleasure of visiting Mr. Gibson at South Haven, who has been making tree records for you furnishing buds and scions from these record trees for propagation of young stock and I am very much interested in the work that he is doing as I realize that stock propagated from such record trees is a great insurance on the productiveness and desirableness of the fruit of young trees propagated from such selected parents. It is very reasonable in these days of scientific breeding to expect that trees producing fruit of the most desirable type of the variety should be selected from propagation."

Mr. Halligan speaks of Mr. Gibson, who has the trees from which we breed under observation, who keeps all the records, collects the data, weighs the fruit and whom we consider the best posted practical orchardist in this country and we now take pleasure in introducing to the patrons of the Greening Nursery Company who are interested in an America More Fruitful, Mr. Roy E. Gibson of South Haven, Michigan, who has been with this company since he left college.

Like all really great men, Mr. Gibson is of easy approach. He has the truly scientific mind in that he is open to conviction on all points. He is neither dogmatic nor positive and the fruit growers throughout Michigan, who have the pleasure of Mr. Gibson's personal acquaintance, will vouch for his exceeding great knowledge of this vast industry and honesty of purpose in his research work.

Mr. Gibson believes from his observations that the possibilities in breeding trees from high-producing stock of character will result in the profit of many millions of dollars to the fruit growers of the United States and the Greening Nursery Company are proud to have a man of Mr. Gibson's character and ability associated with them in this great work of increasing the great yield and profit of the product of American fruit growers.

Shortly after the above was written the August number of the American Fruit Grower was issued, which contained an article on "Improvement of Citrus Fruits Thru Bud Selection," L. C. Corbett and A. D. Shamel, both of whom are known as authorities and are connected with U. S. Dept. of Agriculture devoting their time to the improvement of Citrus fruits in California.

No doubt you read this article, but if not the following illustrates our contention that it is possible to breed pedigreed trees. Here is the paragraph we refer to:

"As this work has progressed and records have accumulated concerning the production of the progeny trees, there has been a remarkable and striking consistency in the behavior of the trees with reference to production, the productive strains continuing to be productive the non-productive strains used consecutively from generation to generation in propagation continuing unproductive."

## APPLES

The apple is justly named the "King of Fruits" and eaten with relish through the seven ages of man. How fortunate are we who live in the United States where the apple is grown to perfection!

In its long continuance throughout the year and in its various uses, it possesses an importance not equaled by any other fruit.

It is the longest keeping fruit known in storage and with an orchard of well-selected varieties, the owner can have fruit the year 'round, it not being difficult to keep apples in common storage until strawberries are in season.

The chiefest factor in an orchard is well-selected varieties. Many good apples in one section are not so good when grown in another, therefore more important than any one thing is selection of the right varieties.

We are listing only those varieties which will make good. When two or more are given for the same season, you will find them equally choice but perhaps of different color or flavor, so the final choice as to variety is left to you.



YELLOW TRANSPARENT

## SUMMER APPLES

✓ **Carolina Red June**—(See Red June).

✓ **Early Harvest**—Fruit medium size, pale yellow, tender sprightly, sub-acid and very good in quality. Desirable for the home orchard because it is one of the earliest of the summer apples and is excellent for either dessert or culinary purposes. Not a desirable variety for the commercial orchard. Tree a good grower, long-lived, comes into bearing rather early and is moderately productive. Season late July and August.

✓ **Golden Sweet**—Fruit medium size, attractive clear yellow when fully matured, rich, sweet, very good flavor and quality. Cultivated principally for home use. Tree a good grower, healthy, hardy, long-lived, bears rather young and yields moderate to heavy crops biennially. Season Mid-August, to late September.

✓ **Red Astrachan**—This is a very beautiful early summer apple of good medium size, yellow, largely covered with light and dark red presenting a striped appearance with red, rather fine, crisp, tender, juicy, brisk, sub-acid, aromatic.

Tree a good grower, coming into bearing rather young. A reliable cropper yielding moderate to good crops. Excellent variety for home use or local market. Season late July to September.

✓ **Red June**—An attractive little apple uniform in size and shape, deep red over yellow, tender, brisk, sub-acid, very good. Tree moderately vigorous. A pretty reliable bearer and commonly yields good crops. Comes into bearing early. For the home orchard only. Season late July to early winter.

✓ **Sweet Bough**—A universal favorite for the home orchard. It is one of our finest summer apples having all the good qualities which should recommend a fruit for general cultivation. As a kitchen fruit in its honeyed sweetness and tender flesh it has no equal in its season. Tree comes into bearing rather young, long-lived, and a very good bearer. Flesh white, moderately firm, fine, somewhat crisp, very tender, juicy, sweet, slightly aromatic, good to very good. Season, August and early September.

## SUMMER APPLES (Continued)

**Yellow Transparent**—This is one of the best extra early apples, being excellent for culinary uses and dessert. Apple sauce made from this variety is not equalled by any other sort. Ripens earlier and is a more reliable cropper than Early Harvest. Excellent for the home or commercial orchard. Fruit medium or above medium sometimes

large, uniform in shape and size. Skin smooth, waxy, pale greenish yellow changing to an attractive yellowish white. Flesh, moderately firm, fine grained, crisp, tender, juicy, sprightly, sub-acid with a pleasant flavor, good to very good. Season late July and August.

## AUTUMN APPLES

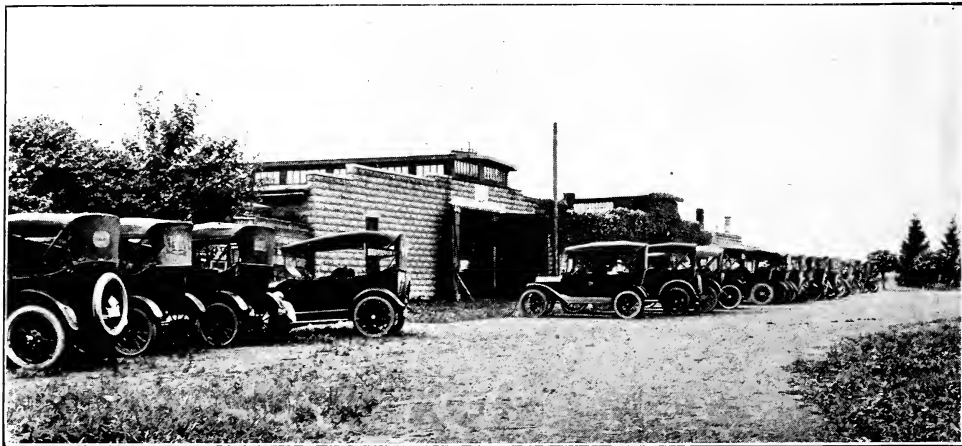
**Alexander**—Fruit very large, attractive red or striped medium to good in quality. Suitable for culinary purposes. Uniform in size and shape. Regarded favorably by many fruit growers as an apple for the commercial orchard. In great demand on certain markets where the fruit brings fancy prices. Tree, vigorous and upright grower. Skin, moderately thick, tough, smooth, glossy, somewhat waxy, greenish or pale yellow with lively red or handsome striped and splashed with bright carmine. Prevailing effect red or striped. Flesh, nearly white with faint yellow tinge, firm, coarse, moderately crisp, tender, juicy, mild sub-acid, fair to good. Season, September.

tember and October or early No-

**Autumn Strawberry (Late Strawberry)**—This is an attractive small to medium size apple, pale yellow after almost entirely overspread with bright purplish red dotted and streaked with purplish carmine — prevailing effect bright striped red. More valuable for the home than the commercial orchard because of its habit of successive ripening which requires several pickings.

Regular cropper yielding moderate to heavy crops biennially or nearly annually. Flesh yellowish white, fine, crisp, tender, juicy, somewhat sprightly, aromatic, sub-acid, very good. Season, September to December.

**Chenango (Chenango Strawberry)** — Fruit beautiful in appearance above medium to large in size. Color, yellowish white often entirely over-spread and mottled with attractive pinkish red, conspicuously striped and splashed with bright carmine of excellent dessert quality and good also for culinary purposes. An early and regular bearer, hardy and healthy. Fruit begins to mature in September and ripens continuously during a period of several weeks. Fruit does not ship well because flesh is too tender, but is a very profitable apple to grow for local or special market. We especially recommend this variety as an excellent one for the home orchard. Flesh white, moderately firm, tender, juicy, mild sub-acid, very aromatic, good to very good. Season, latter part of August and through September.



Cut above shows the autos of the Oakland County, Mich., Horticultural Society when here to visit the nursery. Luncheon was served them in the cellar, entrance of which is shown.

## AUTUMN APPLES (Continued)

✓ **Duchess of Oldenburg**—(See Oldenburg).

✓ **English Rambo**—A very much larger and better apple than the ordinary Rambo. It is really an improvement and a very valuable hardy apple. Color, streaked and marbled with dull yellowish red on pale yellowish ground, dots large, whitish. Flesh tender, rich mild sub-acid, fine flavored, often excellent. Does well in all localities. Late autumn.

✓ **Fall Pippin**—Fruit very large, uniform in shape and size and when fully ripe, of attractive yellow color. Flesh is tender, rich and very good in quality, being excellent for dessert but especially desirable for culinary uses. Tree a strong grower, hardy and very long lived, eventually becomes large or very large. Fruit ripens unevenly. This variety is generally in good demand in local markets but we recommend it more especially for the home orchard as it is one of the most desirable varieties of its season. Color at first, greenish yellow but becoming clear yellow, sometimes faintly blushed. Flesh whitish or tinged with yellow, moderately firm, rather fine and tender, very juicy, agreeable sub-acid, somewhat aromatic, very good. Season, late September to middle December.

✓ **Gravenstein**—Fruit of good size, attractive appearance and excellent quality; for culinary purposes it is unexcelled by any variety of its season. We recommend it for the home orchard only. Usually not a profitable apple to grow for the commercial orchard. Skin thin, tender, slightly rough, greenish yellow to orange, yellow overlaid with broken stripes of light and dark red. Flesh yellowish, firm, moderately fine, crisp, moderately tender, juicy, sprightly sub-acid, aromatic,

quality very good to best. Season late September to early November.

✓ **Maiden Blush**—This is a beautiful apple of pale lemon-yellow color with crimson cheek. It is especially valued for market or culinary purposes. It makes very white evaporated stock. It is recognized as a standard market variety and usually sells above the average prices for varieties of its class. In many localities it has proven a very satisfactory variety for the commercial orchard, because the tree is a fine grower, hardy, long-lived, comes into bearing rather young and is a reliable cropper, yielding good to heavy crops biennially or almost annually. It is sometimes injured by apple scab but this may readily be prevented by proper treatment. Fruit medium to above, sometimes large, uniform in size and shape. Skin thin, tough, pale waxen yellow with crimson blush. Flesh white or with slight yellow tinge, fine, moderately crisp, tender, very juicy, sub-acid, good in quality especially for culinary purposes. Season September to November or December.

✓ **Munson**—Fruit commonly averages about medium size. It is attractive in appearance for a yellow apple, being pale yellow often somewhat blushed. We recommend it for home use only. Not satisfactory for growing commercially because there is little demand for a sweet apple of its season except in certain local markets. The tree is a good grower, comes into bearing rather early and is a reliable cropper commonly yielding good crops biennially. Skin rather thin and tough, separating readily from the flesh, smooth, greenish-yellow often somewhat blushed. Flesh tinged with yellow, moderately fine grained, tender, moderately juicy, sweet, good to very good quality. Season late September to December.



WEEDING SEEDLINGS

## AUTUMN APPLES (Continued)

**Oldenburg** (Commonly Called "Duchess")—This variety is one of the most valuable of the Russian apples thus far introduced into this country. It is of good size and attractive appearance; while it is highly esteemed for home use on account of its excellent culinary qualities, it has proved to be one of the most profitable varieties for the commercial orchard. The tree is highly valued because of its great hardiness. It is vigorous, moderately long-lived, a very reliable cropper, yielding heavy crops biennially, often with lighter crops alternating. The fruit hangs fully well to the tree till it is ripe. It is quite uniform in size and quality, with but a small percentage of loss from unmarketable fruit. Fruit medium to large, averaging above medium, uniform in size and shape. Skin moderately thick, tender, smooth pale greenish yellow or pale yellow, almost covered with irregular splashes and stripes of bright red mottled and shaded with crimson. Prevailing effect red striped; attractive. Flesh tinged with yellow, rather firm, moderately fine crisp, tender, juicy, sprightly sub-acid, aromatic, good to very good in quality for culinary purposes. Season late August and September.

**Twenty-Ounce**—Fruit very large, nearly round, attractive, green becoming yellowish with broad stripes and splashed red. On account of its size the fruit is

in good demand in the general market and sells at good prices. It is especially esteemed for culinary purposes, but inferior to most other varieties for dessert purposes. It keeps well for a fall variety and stands shipping well. Tree vigorous upright grower. Flesh of fruit whitish somewhat tinged with yellow, coarse, moderately tender, juicy, sub-acid, good for culinary use, second rate for dessert. Season late September to early winter.

**Washington Strawberry**—Fruit smooth, of good size and pretty good color, fairly uniform in shape but somewhat variable in size, desirable for either dessert or culinary purposes. The fruit hangs well to the tree. The tree is vigorous, hardy, healthy, moderately long-lived, comes into bearing rather early and is a reliable or almost annual bearer. It is a good variety for the home orchard but not as profitable as others of its season to grow for the commercial orchard. Skin rather thin, tough smooth, somewhat waxy, greenish or yellow, washed and mottled with red, conspicuously splashed and striped with bright carmine and over-spread with thin bloom. Prevailing effect striped red. Flesh whitish tinged with yellow, firm, rather fine to a little coarse, crisp, tender, very juicy, pleasant sub-acid, sprightly, quality good to very good. Season from September, October to early winter.

Stock received yesterday. All in fine shape and I am much pleased with them.—A. L. Pier, Jackson, Mich.

All parties were well pleased with their trees. I had no trouble at all in the delivery and I thank you for the way you have treated me.—Robert Gordon, Chicago, Ill.

As a whole customers have been well pleased with the stock. The evergreens were better than they expected.—Austin M. Eisman, Napoleon, Ohio.

My trees came through in number one condition, though delayed nearly a week on the road. All are living and doing fine. Very much pleased with the stock.—Elmer L. Qua, Gaylord, Mich.

We are well satisfied with the trees bought for the last two years from your Company.—Rev. A. A. Pirnant, Toledo, Ohio.

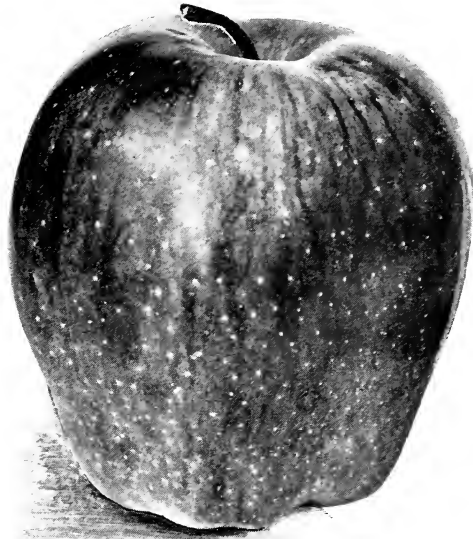
I am very well satisfied with stock you shipped me.—Wm. Kuehlien, Carleton, Mich.

They are certainly a fine lot of healthy, clean and well-rooted trees. Will need more next season.—A. Pfaff, South Haven, Mich.



## WINTER APPLES

**Arkansas Black**—The Arkansas Black is one of the most beautiful of apples, a good keeper, and commands a good price in market. The color is a lively red deepening on the exposed side to purplish red or nearly black. The fruit is medium and pretty uniform in size and shape. A good keeper. The tree is not very productive and therefore not very desirable for planting in the commercial orchard. The flesh of the fruit is decidedly tinged with yellow, very firm, rather fine grained, crisp, moderately juicy, sprightly sub-acid, quality good to very good. Season December to April or later.



DELICIOUS

**Bailey Sweet**—This is a very beautiful apple, distinctly sweet, and of very good quality and averages above medium in size. Skin rather tender, nearly smooth, clear bright yellow largely covered with deep red mottled or obscurely striped with darker red; often irregularly netted markings and dots of whitish or russet gray contrast conspicuously with the red surface. Prevailing effect attractive bright red. Flesh tinged with yellow, firm, moderately juicy to juicy, decidedly sweet, agreeable in flavor, very good in quality. Not a very good keeper. Season, October to January or sometimes later. Not a good commercial variety. Fine for the home orchard.

**Baldwin**—One of the best and most popular red winter apples. Pre-eminently a leading variety for commercial orchards in the Southern Peninsula of Michigan, in the State of New York, and on the clay soils of Northern Ohio. In the South and Southwest it is not desirable because it there becomes a fall apple and also because it does not attain as good quality as it does in the Baldwin belt. Not only is the Baldwin a standard fruit in American markets but it is one of the leading apples used for export trade. It is one of the principal varieties handled in cold storage. The tree is a strong grower, long-lived and vigorous. It is somewhat slow in reaching bearing maturity, but when mature it bears

very abundantly. On rather light, sandy or gravelly soils the fruit is apt to have a better color, or at least to color earlier in the season than it does when grown on heavy clay soil. The Baldwin is grown successfully in various soils and under various climatic conditions. It also yields a uniform grade of fruit with a low percentage of culls when kept free from injurious insects and fungous diseases. The fruit is sometimes large to very large; usual above medium; pretty uniform in size. The skin of the fruit is tough, smooth, light yellow or greenish yellow, blushed and mottled with bright red, indistinctly striped with deep carmine. Flecks of russet, or even broken russet lines may occasionally be seen on the base of the fruit. The flesh is yellowish firm, moderately coarse, crisp, rather tender, juicy to very juicy, agreeably sub-acid, sprightly, somewhat aromatic, good to very good. Season November to March or April in common storage; to May or later in cold storage. Uses, well adapted for general market, dessert and culinary purposes.

**Banana**—See Winter Banana.

**Bellflower**—See Yellow Bellflower.



## WINTER APPLES

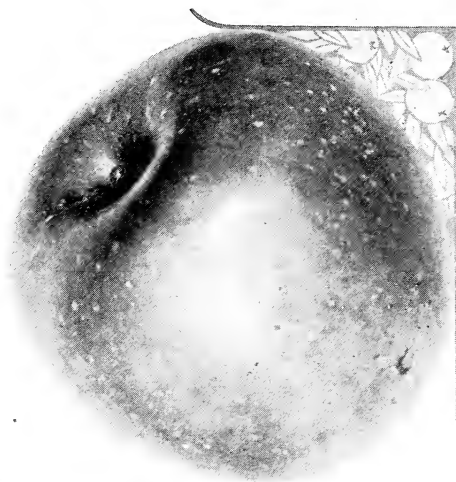
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**Ben Davis**—The Ben Davis is not held in great favor in Michigan, Ohio and Northern New York. It is at its best in the South and Southwest. Very successful as a commercial variety in Virginia, Kentucky, Tennessee, Southern Illinois, Missouri, Arkansas, and portions of adjoining States. It is of second rate quality, but of a good color and an excellent keeper. It often keeps in ordinary storage till May and in cold storage till June or often till July. The tree is very hardy, healthy and vigorous; comes into bearing at an early age and usually bears annually and abundantly. The skin of the fruit is tough, waxy, bright, smooth, usually glossy, clear yellow or greenish mottled and washed with bright red, striped and splashed with bright dark carmine. The flesh is whitish, slightly tinged with yellow, firm, moderately coarse, not very crisp, somewhat aromatic, juicy, mildly sub-acid, fair in quality. Season, January to June.

**Canada Red**—See the improved Steele's Red.

**Delicious**—This is a large apple with a surface almost covered with a brilliant dark red blending to golden yellow at the blossom's end. The tree is hardy, healthy and vigorous and bears regular annual crops. The flesh is fine grained, crisp and melting, juicy, delightfully aromatic, moderately sub-acid to give a pleasing flavor. Quality very good to best. Keeping qualities good. In many sections regarded as an excellent commercial variety. Succeeds well in some sections of Michigan. The variety has not as yet been grown generally in Michigan to give it a thorough test. An excellent Western variety. Season, November to April.

**Esopus (Spitzenburg)**—The Esopus, commonly known as Spitzenburg, is the standard of excellence for apples of the Baldwin class, to which it naturally belongs. When well grown it is handsomely colored and unexcelled in flavor and quality. It is a choice dessert fruit and one of the best apples known for general culinary uses. It is well adapted for handling in cold storage, ships well, and has a long, well-established reputation in the market. As it originated in New York State, it succeeds best there. Being only an average, or rather moderate cropper,



N. W. GREENING

it is not generally planted in the commercial orchard. The fruit is below medium to large; pretty uniform in size and shape. The skin is tough, sometimes waxy, slightly roughened by the russet dots, deep, rich yellow, often almost completely covered with bright red inconspicuously striped with darker red. The flesh is tinged with yellow, firm, moderately fine, crisp, rather tender, juicy, aromatic, sprightly sub-acid, quality very good to best. Season, November to February or later. In cold storage may be held till June. Use, for the home orchard.

**Fallwater**—Fruit large to very large, globular, attractive in size and form. The flesh is coarse and at best but second rate in quality. It is well known in the market and is often handled at satisfactory prices in domestic and also in export trade. The tree is usually a good, regular bearer, producing biennially or in some localities almost annually. Not regarded as a standard commercial variety generally, but in some parts of the country it meets with favor. The skin is tough, smooth, a little waxy, often dull grass green with dull blush, but highly colored specimens eventually become distinctly yellow and largely blushed with bright deep pinkish red. The flesh is tinged with yellow or green, firm, coarse, crisp, moderately tender, juicy, sub-acid to mildly sweet, without distinct high flavor, quality good or nearly so. Season, November to March or April. Use desirable only for cooking and market.



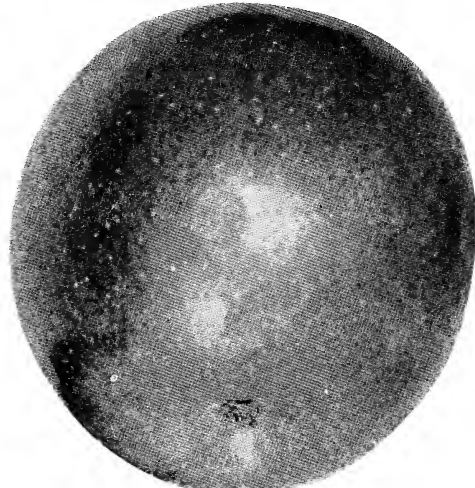
## WINTER APPLES

(Continued)

**Fameuse** (Snow) — Fameuse or commonly known as Snow, is one of the most desirable dessert apples of its season. It is very beautiful in appearance and the flesh is white, tender, and excellent in flavor and quality for dessert. Decidedly inferior to other varieties of its season for culinary purposes. The fruit, when well colored and free from apple scab, sells above average market prices. The fruit is very susceptible to apple scab fungus, but this may be readily controlled by proper preventive treatment. The tree is of medium size, a moderate grower, hardy, healthy, rather long-lived and a reliable cropper, yielding good to heavy crops biennially or sometimes nearly annually. The fruit hangs well to the tree. Fruit of marketable grades is fairly uniform in size, but there is a considerable amount of it that is too small for market. The small apples can be made into the finest flavored sweet cider. The fruit hardly averages medium but sometimes is above medium in size. The skin is thin, tender, smooth, light bright red deepening to almost purplish black in highly colored specimens with a somewhat striped appearance toward the apex. The flesh is white, sometimes streaked or stained with red, very tender, juicy, sub-acid becoming very mild sub-acid or sweetish, aromatic, very good for dessert. Season, October to mid-winter.

**Mammoth Black Twig**—Fruit very large. Color, deep red nearly black. Tree hardy and very productive. Very valuable in the West. Good cropper. Season, November to April.

**Mann**—Fruit medium to large. Color deep green, often overspread with a brownish red blush mingled with a shade of olive green, but late in the season it develops a pronounced yellow color. Moderately coarse, moderately juicy. At first very hard and firm; later becoming moderately tender, somewhat crisp, sub-acid. Fair to good. Trees moderately vigorous to vigorous. Very productive and fruit noted for its smoothness, uniformity and its superior keeping and shipping qualities. A reliable biennial crop. Season, January to May.



**WEALTHY**

**McIntosh**—Fruit above medium to large. Highly perfumed. Color, polished yellow also covered with brilliant crimson. Flesh somewhat white, crisp, very tender, sprightly aromatic sub-acid. Quality very good to best. Tree vigorous. A good annual bearer. Resembles the Fameuse but larger, more hardy and fully equal in quality. Season, November to February. One of the very best varieties for commercial purposes.

**Newton Pippin**—See Yellow Newton.

**Northern Spy**—Fruit large and attractive. Color of bright red overspread with delicate bloom. Flesh very juicy, crisp and tender and most excellent for either dessert or culinary uses. Well adapted for local, general or fancy trade. Of well established reputation and because of its size, beauty, fine flavor and high quality, sells for more than average prices. Ready for use in November and retains crispness and high flavor until the close of the season. Rather slow in coming into bearing. Reliable cropper. Tree very vigorous. Season, November to March.

**Northwestern** (N. W. Greening)—Fruit medium to large or very large. Color, clear pale yellow or greenish, sometimes faintly blushed. Flesh tinged with yellow, medium in texture, crisp and firm, juicy, slightly aromatic, mild sub-acid. Fair to good. Very hardy. Valuable for culinary uses or dessert. Rather slow about coming into bearing and is a reliable biennial cropper. Season, January to June.



## WINTER APPLES (Continued)

✓ **Gano**—This is a variety of the Ben Davis type but in quality a little superior to Ben Davis. It is less striped than the Ben Davis. Very attractive in appearance, stands handling well, and is a good keeper. The tree comes into bearing young and is an excellent cropper, bearing regularly and abundantly. Gano is grown extensively, commercially in about the same region as Ben Davis. The fruit is medium to sometimes large, uniform in size and shape. The skin is smooth, waxy, clear light yellow, mottled and blushed with bright light, pinkish red, often deepening to purplish red more or less obscurely striped. The flesh is whitish, slightly tinged with yellow, firm, moderately tender, rather coarse, moderately crisp, juicy, mild sub-acid, good or nearly good in quality. Season, November to May.

✓ **Gideon**—Fruit above medium to large. Color, an attractive deep yellow or greenish, mottled and blushed with orange red; irregularly splashed with carmine. Flesh yellow, moderately firm, crisp, somewhat coarse, juicy, aromatic, mild sub-acid, eventually becoming sweet. Good to very good. Tree vigorous and hardy. Almost an annual bearer. Season, November to April.

✓ **Golden Russet**—Fruit below medium to above in size. Color, green or yellowish russet, becoming golden russet with bronze cheek. Flesh yellow, rather fine grain, moderately crisp, tender, juicy, rich, agreeable sub-acid, aromatic. Very good. Particularly desirable for home use during the spring months, being then excellent for dessert and culinary uses. The tree is hardy and a biennial bearer. Season, December to April or later.

✓ **Greening**—See Rhode Island Greening and Northwestern Greening.

✓ **Grimes Golden**—Fruit medium to large. Color clear deep yellow with scattering pale yellow or russet dots. Flesh yellow, very firm, tender, crisp, moderately coarse, moderately juicy, sub-acid rich aromatic and sprightly. Very good to best. Excellent for either dessert or culinary uses. It is a biennial bearer and good cropper, subject to collar-rot and should be double-grafted for best results. Season, November to February. One of the best pure yellow winter apples. Fine for the commercial as well as the home orchard.



STEELE'S RED

✓ **Hubbardston**—Fruit above medium to large, sometimes very large. Color, yellow or greenish, blushed and mottled with red which varies from dull brown to bright red and is more or less marked with deep carmine. Flesh white, slightly tinged with yellow. Moderately firm, rather fine grain, tender, moderately crisp, juicy, aromatic, rich, and very sprightly but becoming moderately sub-acid, mingled with sweet. Very good to best. Excellent variety for commercial planting. Season, October to January.

✓ **Jonathan**—Fruit medium to small, rarely large. Color pale yellow, overlaid with red, striped with carmine. When well colored always completely covered with red, which deepens to purplish on the sunny side. Flesh white or sometimes with tinge of red, firm, crisp, tender, juicy, very aromatic, sprightly sub-acid. Very good to best. In all, a very beautiful apple, high-flavored, of excellent quality either for dessert or culinary uses. One of the most desirable varieties for the fancy trade at the Holiday season. Reliable biennial cropper, coming into bearing rather young. Season, November to January.

✓ **King**—See Tompkins' King.

✓ **Ox Noble**—Fruit very large. Color richly striped and mottled with dark red. In quality equal to the Baldwin, but fruit much larger. Tree hardy and a splendid, vigorous, erect grower. Originated in Washtenaw County, Michigan, and introduced by us in 1880. Very valuable market variety. Season, November to March.

✓ **Pewaukee**—Fruit above medium, often large, fully uniform in size. Color, green becoming yellow, washed and mottled with orange or red striped or splashed with carmine, often covered with bloom. Flesh nearly white, mod-

## WINTER APPLES (Continued)

erately firm, slightly coarse, rather tender, very juicy, sub-acid, slightly aromatic. Fair to good. Tree strong grower, healthy, hardy, coming into bearing rather early and a reliable biennial cropper. Season variable, commonly January to May.

✓ **Rambo**—Fruit medium size. Color, pale greenish-yellow mottled with red, striped with carmine and overspread with grayish blue. In high colored specimens the red is predominant. Flesh white with tinge of yellow or green, firm, rather fine grained, very crisp, tender, juicy, mild sub-acid, aromatic. Good to very good. Particularly desirable for dessert or for home use. Season, October to January.

✓ **Rhode Island Greening**—Fruit above medium to large, uniform. Color smooth, waxy, grass green, varying to yellow. Flesh yellowish, firm, moderately fine grained, crisp, tender, juicy, rich, sprightly sub-acid, peculiarly flavored. Very good in quality. Tree rather slow coming into bearing. Yield moderate to heavy, biennially. Season, December to March.

✓ **Rome Beauty**—Fruit large, roundish, mostly covered with bright red on pale yellow ground. Flesh tender, not fine grained, juicy. Of good quality.

Ripens early in winter. The large size and beautiful appearance of this Ohio apple renders it popular as a market variety. Season, November to February.

✓ **Roxbury Russet**—A vigorous and spreading grower. Fruit medium to large. Partly or wholly covered with a rather rough russet or greenish-yellow ground, sometimes a dull brown cheek. Flesh greenish-white, rather granular, slightly crisp with good sub-acid flavor. Keeps late in spring. Succeeds well throughout the Northern States. Reliable biennial cropper. Quality good to very good. Season, December to May, or in cold storage to July.

✓ **Salome**—Fruit below medium to above, uniform in size and shape. Color, pale yellow or greenish, more or less mottled and blushed with pinkish red, rather obscurely striped with carmine. Flesh tinged with yellow, firm, moderately fine grained, crisp, rather tender, juicy, sprightly sub-acid, good to very good. The tree is hardy. Season, November to March.

✓ **Seek-No-Further**—See Westfield.

✓ **Shiawassee**—Fruit medium. Color deep brilliant red on greenish yellow ground. Flesh firm, very white, tender, crisp, juicy, refreshing, sub-acid.



**TWO-YEAR-OLD APPLE TREES IN OUR NURSERY**

The photograph was taken in the latter part of August before they had full growth. Note smooth bodies and vigorous growth. This result is obtained by thorough cultivation, proper pruning to a well-balanced head and constant spraying which keeps the trees healthy and growing.

## WINTER APPLES (Continued)

**ROME BEAUTY**

aromatic. Tree vigorous. Very productive. Resembles Fameuse but a stronger and upright grower. Fruit large. Season, October to January.

**Snow**—See Fameuse.

**Spitzenburg**—See Esopus.

**Stark**—Fruit medium to large, sometimes very large, uniform. Fruit smooth or slightly rough with russet dots of pale green, becoming yellow, more or less blushed and mottled with red and rather indistinctly striped with dark red. Prevailing effect dull green and red, but in highly colored specimens, red. Flesh yellowish, firm, moderately fine to coarse, rather tender, juicy, sprightly, mild sub-acid not high in flavor. Fair to good, or nearly good in quality. Tree a vigorous grower, upright, spreading, roundish regarded as a good variety for the commercial orchard. A reliable cropper and very productive. Succeeds in the region where Baldwin does well and also North, South and West beyond the range of profitable cultivation of the Baldwin. Season, January to May.

**Stayman Winesap**—The best of the Winesap family. Fruit medium to large, uniform. Color, green, becoming yellowish, often nearly completely covered with dull mixed red and indistinctly striped with dull carmine. Flesh tinged with yellow or slightly greenish, firm, moderately fine grained, tender, moderately crisp, juicy to very juicy, aromatic, sprightly, pleasant sub-acid. Good to very good. Tree moderately vigorous, spreading, coming into bearing early and a reliable annual cropper. A valuable variety for both home use and commercial orchards. Season, December to May.

**Steele's Red** (Sometimes Called Canada Red or Ked Canada)—As a long-keeping market apple with good color, this variety is unsurpassed, invariably brings \$1.00 or \$2.00 more per bushel than other apples. The only drawback has been its slow growth, but by the Greening method or top-grafting it in the nursery on a hardy, fast-growing Gideon stem and French Crab root, we have completely overcome its slow growing characteristics. By top-grafting it will come into bearing as quickly as any good standard variety of apple. Fruit medium to nearly large, uniform. Color, rather clear light yellow or green, overspreading in well-colored specimens with a fine deep red, blushed indistinctly, striped with deeper red. The dots conspicuously of gray or fawn color. Flesh, whitish with yellow or greenish tinge, firm, crisp, rather fine grained, tender, juicy, aromatic, rich, agreeably sub-acid, becoming rather mild toward the close of the season. Quality good to best. Valuable for either commercial or home use. A biennial bearer. Season, November to March or later.

**Sutton Beauty**—Fruit medium to large, uniform. Glossy, smooth, attractive, bright red, striped with carmine or purplish carmine, nearly overspreading the lively yellow or greenish ground color. Prevailing effect attractive red, blushed slightly, tinged with yellow. Rather firm, moderately fine grained, crisp, tender, juicy, mild sub-acid. Good to very good. Tree very valuable and healthy. Its beautiful color and pleasant quality unites to make the Sutton an excellent dessert apple. It is less desirable for culinary uses, adapted for the fancy market and fruit stand trade, also home use. Season, November to April.

**Tolman Sweet**—Fruit small to medium, uniform. Color, pale clear yellow or whitish yellow, sometimes a little blushed, dots small inconspicuously pale yellow or faint russet. Flesh white, firm, neither tender or crisp, rather hard, moderately fine, rather dry to moderately juicy, decided sub-acid. Good to very good. Tree is a good grower, long-lived and very healthy. Comes into bearing moderately early. A reliable cropper, biennially or almost annual. Fruit much esteemed for culinary purposes, such as pickling, boiling, and baking. Season, November to April.



## WINTER APPLES (Continued)

- ✓ **Tompkins' King**—Fruit large to very large, uniform in size and shape. Color, fine yellow mottled and washed with orange red, often shaded to lively red, striped and splashed with bright carmine, dots rather numerous, conspicuously white or russet. Prevailing color attractive red over yellow. Flesh, yellowish, coarse, crisp, tender, aromatic, juicy, sub-acid. Quality very good to best. Tree rather slow about coming into bearing, but when mature becomes a regular bearer, yielding light to heavy crops biennially. Valuable for home and commercial use. Season, November to March.
- ✓ **Wagener**—Fruit medium to rather large. Color, glossy bright pinkish red, striped with bright carmine and mottled and streaked with thin whitish scarf-skin, over a pale clear yellow, becoming red. Dots numerous, whitish or russet. Prevailing color, bright light red. Flesh whitish, slightly tinged with yellow, moderately firm, rather fine grained, crisp, tender, juicy to very juicy, sub-acid, aromatic, sprightly. Very good to best. Season October or November to February. Tree dwarfish to medium sized grower. Valuable for fillers in commercial orchards. The fruit is desirable for both culinary and dessert purposes. Comes into bearing earlier than any other good commercial variety.
- ✓ **Wealthy**—Fruit large sized, roundish. Skin smooth, splashed with dark red. Flesh, white tender, juicy and sub-acid. Season, November to January. A native of Minnesota, where it has proven perfectly hardy, vigorous and productive. Comes into bearing early. Very popular on account of its handsome appearance and valuable as a market apple.
- ✓ **Westfield (Seek-No-Further)** — Fruit medium, sometimes below. Color, rather deep yellow or greenish shaded and splashed with dull red, but in highly colored specimens largely overspread with bright pinkish red, striped with deep carmine. Dots large and conspicuous, pale yellow, grayish or russet. Flesh, slightly tinged with pale yellow, firm moderately grained, crisp, tender, breaky, juicy, mild sub-acid, rich peculiarly aromatic, sprightly. Very good to best. Tree vigorous and hardy. Little value for cooking but an old favorite dessert apple. Season, November to March.
- ✓ **Winesap**—Fruit medium, uniform in size and shape. Skin smooth, glossy, bright deep-red, indistinctly striped and blotched with very dark purple over a very distinct yellow ground color of green, if not mature is overspread with faint bloom. Dots rather small, scattering whitish. Prevailing effect bright deep red. Flesh tinged with yellow, very firm, rather coarse, moderately crisp, very juicy, spright sub-acid. Good to very good. Season, December to May. This is one of the oldest and most popular apples in America. Tree vigorous, coming into bearing early, and it is a remarkable regular cropper. This is a well-known market apple, particularly valuable for the South and West.
- ✓ **Winter Banana**—Fruit large to very large. Skin smooth moderately thick, waxy, bright pale yellow often with a blush, which in well-colored specimens deepens to a dark pinkish red. Dots numerous, whitish and submerged, or with fine russet effect. Prevailing effect yellow with a pretty contrasting blush. Flesh whitish, tinged with pale yellow moderately firm, a little coarse, somewhat crisp, tender, juicy, mild, sub-acid, distinctly aromatic. Good to very good. Tree a vigorous grower and a remarkable early bearer, yielding moderately to very heavy crops. In season from mid-November to May.
- ✓ **Wolf River**—Fruit very large. Smooth yellowish white splashed with bright red. Dots large, scattering, light gray. Flesh yellowish-white, coarse, tender dry with ripe sub-acid, not rich. Medium quality only. Valuable in the Northwest. Tree vigorous and fairly productive. Season, November to January.
- ✓ **Yellow Bellflower**—Fruit variable, small to large or very large. Skin smooth, bright pale lemon yellow varving to white in the shade and often a brownish red in the sun, which in highly colored specimens deepens to a pinkish red blush. Dots whitish or russet, numerous and small towards the base, larger and scattering towards the cavity. Prevailing effect bright pale yellow. Flesh whitish, tinged with pale yellow, firm, crisp moderately fine grained, rather tender, juicy, aromatic. Very good for culinary uses, rather too acid for dessert early in the season but later its acidity becomes somewhat subdued. Highly esteemed for home use. Tree a good grower, hardy, healthy and long-lived. Season, December to April.
- ✓ **Yellow Newton (Newton Pippin)**—Fruit medium to large. Color yellow with distinctly pinkish blush, especially about the base. Flesh yellowish, firm, crisp, tender, moderately fine grained,



## WINTER APPLES (Continued)

juicy with a fine aromatic sub-acid flavor. Quality very best. Season, February to May. Tree bears young and yields good crops biennially.

**York Imperial**—Fruit uniform, above medium to large. Color green or yellow, blushed with moderately bright red or pinkish red and indistinctly striped with carmine. Dots pale yellow or russet, often conspicuous.

Flesh yellowish, firm, crisp, a little coarse, moderately tender, moderately juicy at first, sprightly sub-acid but becoming mild sub-acid or nearly sweet, somewhat aromatic. Good to very good. Tree vigorous, a regular annual or biennial bearer. Season January to May. Not hardy for extreme cold climates.

## CRAB APPLES

Crab apples succeed equally well in all sections, and are valuable for preserving, jelly, cider, ornament, and some of the improved varieties are excellent for eating. A valuable market fruit.

**Grant**—Fruit large. Color, yellow with stripes of dark red, almost black on the sunny side. Flesh white, moderately fine grained, mild sub-acid. Season, September to October.

**Hyslop**—Fruit medium. Color, yellow, rounded with heavy shade of deep crimson, splashes of maroon with heavy blue bloom. Flesh fine, firm, astringent. Bears abundantly in clusters. It is highly colored and commands average market prices. It is one of the most desirable for culinary purposes and for market. Tree hardy and vigorous. Season, September to October.

**Transcendent**—Fruit medium to large. Color, brownish yellow with blushes of carmine. Flesh firm and crisp, yellowish, fine grained, very juicy, acid. Tree is a hardy and vigorous grower. Comes into bearing early. Immensely productive. Season, September to October.

**Whitney**—Fruit large. Color, yellow, striped with red, mostly covered with red on the sunny side. Flesh yellow, firm, very juicy and rich. Fruit in size and quality is equal to many apples. Tree a vigorous and handsome grower. Season, August.



The trees arrived in good condition and will finish setting today. All fruit men who have seen the trees marvel at the size and uniformity of them, which naturally pleases the young man as he is putting his best effort in making a cherry orchard of this one of which he may be proud.

Thanking you, I am,

W. BUTLER,  
Shelby, Mich.



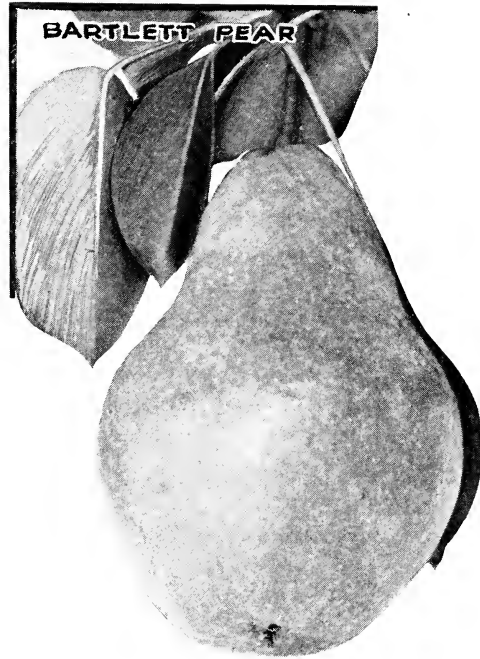
## PEARS

The Pear is equal if not superior to most other fruits. Its varieties cover a longer season than any other, except the apple. It succeeds wherever the apple does, but does best in heavy clay and clay loams.

Unlike other fruits, pears must be picked before they ripen enough to eat. Wait until they have attained full size and begin to show the colors of maturity. As soon as picked they should be wrapped in paper and packed in a box.

Some varieties succeed better as dwarf than standard. (See under Dwarf Pears.)

Standard varieties should be planted from 18 to 25 feet apart, dwarf varieties from 10 to 15 feet apart.



## SUMMER PEARS

✓ **Bartlett**—Large size; yellow, often with a beautiful blush next the sun; buttery, very juicy and highly flavored. Tree a strong grower, bearing early and abundantly; very popular; the most profitable for market. Last of August and first of September.

✓ **Clapp's Favorite**—A large, fine pear resembling the Bartlett, but without its musky flavor; pale lemon yellow, with red cheek; fine texture, melting, buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree hardy and very productive; very desirable in all sections, and especially so where other varieties fail. August.

✓ **French**—The tallest growing pear tree known, reaching the height of 100 to

150 feet. A great bearer and hardy. Fruit yellow, medium, perfect in shape, very rich in flavor, highly perfumed; most valuable pear for canning yet introduced; retains its rich flavor after cooking; not a good commercial pear. Middle to last of August.

✓ **Koonce**—Originated in Southern Illinois. A strong, upright grower, hardy; has produced crops when all other varieties were killed by frost. Fruit medium; yellow with carmine cheek; ripens with the earliest. July and August.

✓ **Wilder**—Very early, resembling Summer Doyenne; claimed to be a good shipper for an early pear. Small. First of August.

About two years ago I planted some Montmorency cherry trees and have had such good success, as they bore fruit last summer that I would like to get fifty more.—John F. Eiszner, Chicago, Ill.

Out of 500 peach trees in three years I only lost 8. Yours for the Greening stock.—J. M. Gregg, Chairman of the County Board, Omaha, Ill.

Received your shipment of trees in perfect condition and planted them at once. Thank you for the accommodation.—A. Bieniawski, St. Joseph Rectory, Manistee, Mich.



## AUTUMN PEARS

**Angouleme** (Duchess d'Angouleme)—Very large; greenish yellow, sometimes a little russeted, makes a beautiful tree; very productive. One of the best. October and November. Succeeds best as a dwarf.

**Anjou**—A large, fine pear; buttery and melting, with sprightly, vinous flavor. Tree a fine grower and good bearer. One of the very best. October to December.

**Flemish Beauty**—Large, beautiful; juicy, melting, rich and fine; strong grower and good bearer; hardy everywhere. A very popular market variety. Fruit subject to skin scab; spraying with lime and sulphur mixture 1 gallon to 30 of water, will prevent it. September to October.

**Howell**—Large; light, waxen yellow, with a fine red cheek handsome; rich, sweet, melting, perfumed aromatic flavor. Tree a free grower, an early and profuse bearer. Very hardy and valuable. September to October.

**Kieffer**—Well known everywhere. Said to have been raised from seed of the Chinese Sand Pear, accidentally crossed with the Bartlett or some other kind. Large; skin rich golden yellow, sprinkled thickly with small dots and often tinted with red on one side; flesh slightly coarse, juicy, with a pronounced quince flavor. Tree very vigorous and an early and great yielder. Next to the Bartlett it has been planted most extensively for market. November to December.

**Lincoln, Illinois**—Large and of good quality. Ripens in late fall. The value

of the Lincoln Pear lies in its comparative exemption from blight and disease, in its hardiness and great productiveness. The fruit is medium to large, with a rich aromatic flavor; core small and healthy, and the fruit has a beautiful waxy appearance when fully ripe. Trees grow to an enormous size. October to November.

**Louise** (L. B. de Jersey)—Rather large; greenish yellow, with a bright red cheek; juicy, buttery and melting, excellent; very productive. A fine grower on both standard and dwarf. October to November.

**Seckel**—Small; rich yellowish brown; one of the best and highest flavored pears known; productive. September to October.

**Sheldon**—Fruit large, roundish; yellowish, nearly covered with light russet; slightly shaded with red; flesh very juicy, melting and delicious; tree hardy, vigorous and good bearer. One of the best varieties. Has never been known to blight. October.

**Vermont Beauty**—A beautiful new seedling pear; medium size, roundish, obovate, yellow, nearly covered with carmine; flesh melting, sprightly, fine quality; tree healthy, hardy and productive. October.

**Worden**—Larger than Seckel. Flesh dull white; very juicy, buttery, melting and excellent. Seedling of the Seckel, which it surpasses in size, beauty and keeping quality. Ripens in October. Good keeper.

South Haven, Mich. June 1, 1920.

The Greening Nursery Co.,  
Monroe, Mich.

Gentlemen:

I have just completed my sixteenth annual delivery for your Company. As usual, the stock delivered gave good satisfaction to growers who know good trees and want only the best. Out of the four cars this year every order was delivered and not a tree was rejected.

In this sixteen years I have sold close to 1,000,000 of your trees. Orchards of peach, pear, apple, cherry, plum, and quince are in bearing in large numbers and the results received from these orchards explain the large sales of Greening's trees here—this year of high prices.

I am glad to make this report as I am sure you will be pleased to know that the trees delivered so nicely.

Yours very truly,

ROY E. GIBSON.

Mr. Gibson is in the heart of the Michigan fruit belt and is considered one of the best informed men in Michigan on practical fruit growing.





### THE WONDERFUL BOSCH PEAR

The Bosch pear was considered, years ago, as an impossible variety to grow successfully on account of its feeble and straggly growth. But under the Greening method of double-grafting the Bosch on the stem of the Keiffer and French Pear root, we change the tree to a strong and vigorous grower.

It is an early bearer of beautiful golden color; very productive, large size (3½ to 5 inches); a good late fall keeper and is of the most luscious, honey-like flavor. Its profits as a market pear are astonishing, bringing \$4.00 to \$5.00 per bushel on the average commercial market.

## WINTER PEARS

**Bosc**—Originated in Belgium. Shape, oblate-pyriform and of very large size. Color, a beautiful yellow, touched with crimson and slightly russeted. In quality it is undisputed as the most delicious dessert pear known. A medium late variety. The tree, however, is a poor grower, but under our method of double-grafting we restored it to a strong, thrifty and productive tree. This pear always sells at the highest prices, frequently bringing as high as \$4.00 to \$5.00 per bushel in the commercial markets.

**Clairgeau** (C. De Nantes)—This wonderful late pear was originated by Pierre Clairgeau, of Nantes, France. It is one of the most showy and well-formed pears grown. Fruit large, with a very stout stem. Color when matured is a golden yellow with a highly colored red cheek. It is one of the most highly flavored pears and the heaviest bearer

in cultivation, bearing annual crops when other varieties fail. Fruit is very firm and will not bruise in falling. Tree exceedingly hardy and vigorous in growth, forming a beautiful pyramid. Heavy bearer, even on two and three-year-old trees. Trees usually require propping up the third year to keep them from breaking down. October to January.

**Lawrence**—About medium; yellow, thickly dotted; very rich, fine flavor. One of the best. Tree a good grower and very productive. December to January.

**Lincoln Coreless**—Fruit very large, handsome appearance; quality only medium, and very few if any seeds. Almost clear of core and seeds, whence its name. A good keeper. Golden yellow. Tree a good grower and very productive; has never been known to blight. December to March.

## DWARF PEARS

Dwarf Pears should be planted below the bud, sufficiently deep (three or four inches) to cover the junction of the pear and quince. Dwarf frequently succeed where Standards fail especially where the soil is deficient in clay loam. It is very important to select the proper varieties, however, as all varieties of pears do not succeed well as dwarfs. Those most desirable are: Angouleme, Bartlett, Clapp's Favorite, Keiffer, Koonce, Louise and Seckel. Among these we find the Angouleme and Clairgeau the most profitable. Plant from 10 to 15 feet apart.

In regard to the Steele's Red apple received, in reply will be pleased to impart what little information that has come to my notice; first, the tree is not as vigorous a grower as some varieties, never needing so much pruning as the more vigorous growers. When properly sprayed and cared for the fruit is of the finest quality, good color, in fact is the best apple for table use of all the winter varieties. The keeping qualities of the Steele's Red are good. Some of my customers tell me that they have kept them in their common cellar storage in the city until June. In my estimation the Steele's Red as grown in my own county (Oakland) has no equal for a winter variety for home use.

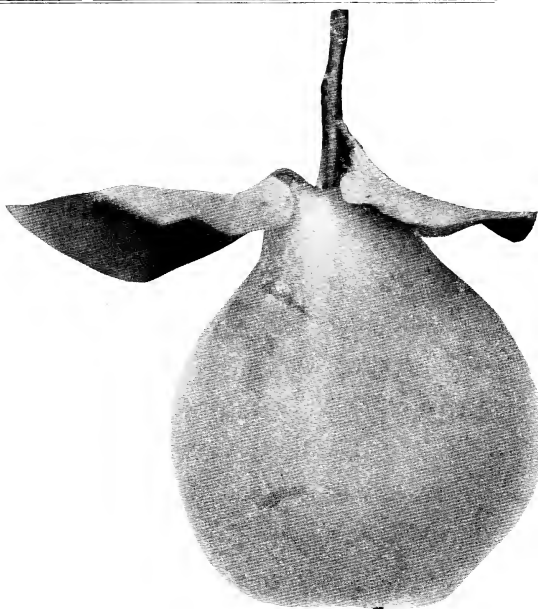
C. A. BINGHAM,  
Pres. Michigan State Horticultural Society,  
Birmingham, Mich.

I believe that Steele's Red apples stand at the head of all winter apples. Worked on Gideon it has no equal.—E. O. Orton, Bangor, Mich.

The trees which you shipped last spring are all growing fine. Please send me a catalog of trees and berry bushes.—Walter Carpenter, Ionia, Mich.

## QUINCES

The Quince is of late attracting a good deal of attention as a market fruit. It is hardy and compact in growth and requires but little space. It is productive if handled properly and gives regular crops, coming into bearing in about two or three years and continues productive, if well managed, for forty years or more. The fruit is much sought after for canning, preserving and for jellies. It gives a delicious flavor to the apple, cooking in any manner. They should be planted ten or twelve feet apart on deep rich soil.



ORANGE QUINCE

**Champion**—A prolific and constant bearer, fruit averaging larger than the Orange, more oval in shape, quality equally fine; bears extremely young, producing fine fruit on two-year trees in nursery row; can be kept in good condition until January. Tree a vigorous grower and prolific bearer; one of the best for sections not subject to early frosts.

**Orange**—Large, roundish; bright golden yellow; cooks tender, and is of very excellent flavor. Valuable for preserves or flavoring; very productive; the most popular and extensively cultivated of the old varieties. October. (See illustration.)

**Missouri** (Missouri Mammoth)—The largest quince in cultivation. Has stood severe cold; a thrifty grower and prolific bearer. One of the very best.

**Rea** (Rea's Mammoth)—A seedling of the Orange Quince; one-third larger; of the same form and color; fair handsome, equally as good and said to be as productive.

Ann Arbor, Mich., Sept. 30, 1919.

Mr. Chas. E. Greening:

Dear Sir—Yours at hand. I have 14 trees in bearing. I put an exhibit at the Washtenaw Fair; they took the first prize. Mr. Scott, your agent from Ypsilanti, was there. I will enclose you two letters from W. L. Schoof, Macomb; please return these to me again. Two parties came from Flint, after they saw the plums on the trees they were more than pleased. Mr. Waterman and his wife were here and his neighbor and his wife from Salem. When Mrs. Waterman saw the plums on the trees she said, "Ain't you ashamed that you countermanded part of your order?" He said, "I am," but said he thought because the plums were so large that they would be shy bearers; but he was more than pleased when he saw the way they bear, limbs the size of a lead pencil from 8 to 12 plums on and the trees free from all disease, there is no sign of black knot on any of them. I want you to give me full instructions how plums want to be sprayed; I never sprayed any of them the way they ought to be sprayed. If you should come let me know so that I will be home.

Yours very respectfully,  
GEO. APRIL.

## PEACHES

Next to the Apple, the Peach has the widest variety of uses and if the apple can be justly called the "King of Fruits," the peach is "Queen." The peach has been told of in song and story since the beginning of time and enjoyed by all mankind the world over. Popular opinion has it that the peach is a short-lived, tender tree, but as a matter of fact it is now grown successfully in every State of the Union.

The variety to choose always depends on the section of the country in which they are to be grown and for what purpose. Some of the most delicious are fit only for home use and are not good as a commercial product.

It is quick to reach the bearing age, and with the right selection of varieties and the care given that it should have, the fruit may be enjoyed by all for three or four months every summer and fall.

Perhaps it might be well to state here, that we are the largest growers of peaches in the country, having an unusual combination in soil and climate on the western shore of Lake Erie. A visit to our nursery and the sight of the stock we have growing will convince anyone as to the truth of this statement.

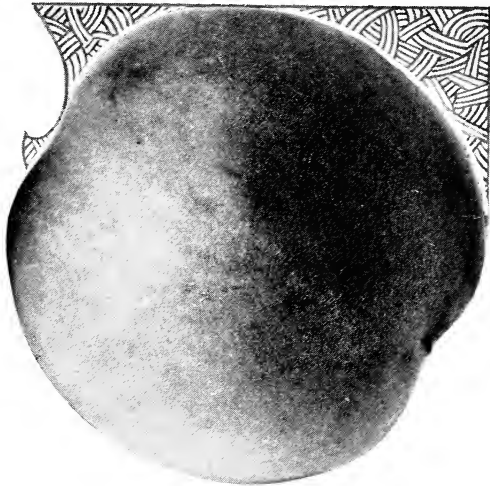
**Alexander**—Medium size; skin greenish white, nearly covered with rich red; flesh melting juicy sweet; tree vigorous and productive; ripens three weeks earlier than Early Crawford. Cling. July.

**Banner**—Originated at Woodslee, Ontario, Canada. Fruit large, round and very handsome. Tree very hardy and an early and abundant bearer. No other late peach compares with it in quality. In bearing and quality of fruit it equals New Prolific. Unsurpassed in point of richness of flavor. A strong, vigorous grower. Winner of ten first premiums at Canadian agricultural fairs. Color deep yellow, with a rich crimson bloom. Flesh golden yellow from pit to skin. Pit small and perfectly free. Its shipping qualities are unsurpassed. Season of ripening, October 1st, the very best time to bring the highest price in market.

**Bronson**—Large; yellow, with handsome red cheek; flesh sweet, rich; fine flavor; tree hardy and a good bearer. Middle of September.

**Carmen**—Large, resembles Elberta in shape; color creamy white with deep blush; skin very tough flesh tender; fine flavor and quite juicy. Ripens with Rivers. One of the hardiest in bud; quality very good. August.

**Champion**—A new variety originated at Nokomis, Ill., very hardy and productive. Fruit large and attractive; skin creamy white with red cheek, flesh white, juicy and sweet; cling. August 15th.



**BANNER PEACH**

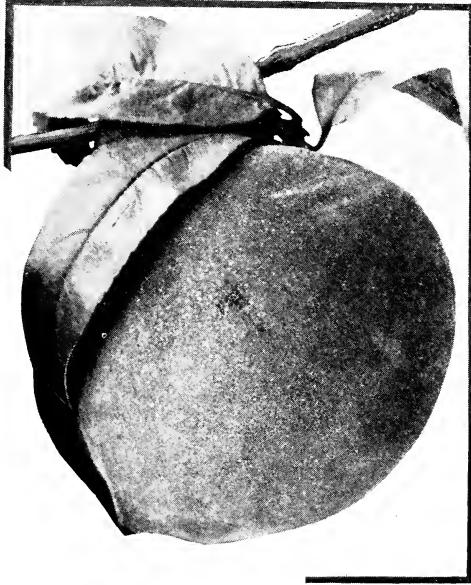
**Crosby**—Fruit medium size, roundish, slightly flattened; bright red cheek; flesh yellow. Tree unusually hardy. Middle of September.

**Dewey**—A perfect freestone peach, ripening with Triumph, but has better form, brighter color on the surface, is equally hardy and productive. The flesh is of uniform color and texture to the pit. July.

**Ear'y Barnard**—Medium size popular peach; yellow, with red in the sun; flesh yellow and very good; tree vigorous and good bearer. One of the hardiest. First of September.

## PEACHES (Continued)

- ✓ **Early Crawford**—A magnificent, large yellow peach of good quality. Tree vigorous and productive, although tender in fruit bud. Its fine size and beauty make it one of the most popular sorts. No other variety has been so extensively planted. First of September.
- ✓ **Engle** (Engle's Mammoth)—Large, round, oval, suture slight; yellow with red cheek; stone small, free; sweet, rich, juicy. One of the very best market sorts. Early September.
- ✓ **Fitzgerald**—An improved Early Crawford, being fully equal to it in size, quality and color; in Canada and Michigan has proven one of the hardest. Fruit large, brilliant color, bright yellow suffused with red; small pit, flesh deep yellow, best quality. Last of August.
- ✓ **Gold Drop**—This variety has a sort of transparent golden appearance. Good quality, a very early and abundant bearer; hardy. Medium size. Last of September.
- ✓ **Gold Mine**—Originated at Paw Paw, Michigan. Originator says it is crossed between the Honest John and Late Crawford; equal to Hill's Chilly and Crosby for hardiness and excels Late Crawford in size, color, quality and firmness of flesh. Ripens with Late Crawford.
- ✓ **J. H. Hale**—Originated in the famous Hale orchards. Widely planted. About the size of Elberta. Ripens about five days earlier. Color yellow with deep carmine blush. Good shipper. A handsome peach. Fine variety for market.
- ✓ **Kalamazoo**—Medium size; slightly oblong; yellow, shaded with red; juicy, rich, melting; highly esteemed in Michigan. Middle of September.
- ✓ **Kihlken Smock** (New)—Larger, better and more beautifully colored than Beers' Smock. Discovered in the orchard of George Kihlken, Danbury, O., in 1909. This peach will be worth millions to fruit growers. One of the best late peaches. First of October.
- ✓ **Late Crawford**—Fruit of large size; skin yellow or greenish yellow, with dull red cheek; flesh yellow; tree vigorous and productive; one of the best late sorts. Ripens last of September.
- ✓ **Lemon Free**—Almost lemon shape, pointed at the apex; color a pale lemon yellow when ripe. It is of large size, of excellent quality; a valuable market sort. Ripens after Late Crawford.
- ✓ **Elberta**—Large, yellow, with red cheek; flesh yellow, firm, juicy, of fair quality. Exceedingly prolific, sure bearer and hardy. Is doing well in all peach sections north and south. One of the leading market varieties. September 10th to 15th.



ELBERTA PEACH

✓ **Matthews' Beauty**—Originated at Cuthbert, Georgia. Ripens two weeks later than Elberta, is better in quality and large in size. It is of Smock strain. Quality is best. Vinous, juicy, very rich; color deep yellow streaked with red. Flesh very thick and firm; very rich yellow; freestone. We have seen specimens weighing 17 ounces. Season last of September.

✓ **Mayflower**—Earliest peach known, semi-cling, size medium, color bright red; ripens well to the seed. Young and prolific bearer, new. Last week in June.

✓ **Mountain Rose**—Large; skin whitish, rich, splashed with light and dark red. Flesh white and very delicious. It ripens early, about first of August.



## PEACHES (Continued)

**New Prolific**—One of the most popular market varieties. Fruit large, golden yellow with rich crimson cheek; flavor very rich and spicy; flesh golden yellow from pit to skin, firm and unusually thick; pit very small; freestone. It stood the cold winter in 1898 better than any other variety. Tree a strong

**Niagara**—Very large yellow peach. Some growers esteem it more highly than any other for market purposes; surpasses Elberta in size, color, quality; vigorous. Ripens between Crawford and Elberta.

**Old Mixon Cling**—Large; whitish yellow with red cheek; juicy, rich and highly flavored; one of the best clingstone peaches. Season, last of September.

**Old Mixon Free**—Large; pale whitish yellow with red cheek, tender, rich and good. One of the best white flesh peaches. Season, first to middle of September.

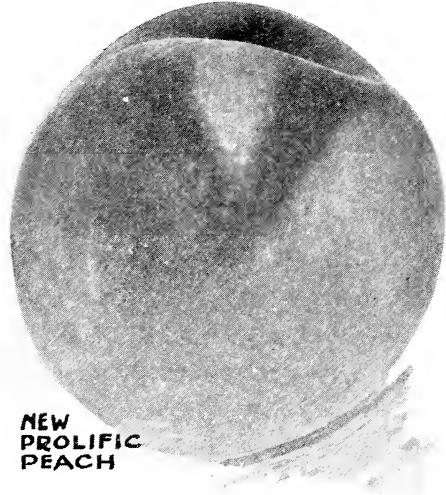
**Rochester**—A new yellow freestone, having the exceptional merits of being early, ripening about August 10th; extraordinary sweetness and early bearing. In other respects compares favorably with the best standard varieties; rapidly attracting attention. Fruit large, yellow, sweet, juicy and of delicious flavor; keeping and shipping well; skin prettily blushed; tree vigorous grower and hardy, annual and prolific bearer.

**St. John**—A grand peach ripening a week ahead of Early Crawford and fully or nearly as large in size and equal in quality, color and flavor. Color yellow, with a fine red cheek, fruit round, brilliant, showy; one of the earliest yellow peaches; commences bearing young and produces abundantly. Middle of August.

**Salway**—Fruit large and roundish; deep yellow with a dull red cheek; flesh yellow, firm, juicy and rich; one of the very best late peaches where it will ripen. October.

**September Mammoth**—Extra large fruit, somewhat elongated. Color yellow. Flesh yellow and delicious in flavor. Free from pit. Good bearer. One of the finest peaches to plant for home purposes. Ripens about September 10th. Tree originated here in Monroe from a seedling. Every home-owner should have one or more of these trees. Of northern origin, therefore

grower and very productive. Ripens 5th to 10th of September, just before Late Crawford. Hundreds of thousands of trees of this variety have been planted. No variety has ever been introduced which is finer in quality and more profitable for market. Introduced by us in 1890.



hardier than Elberta. This peach was introduced after careful observation of its habits and we can recommend it highly.

**South Haven**—Tree vigorous, of semi-spreading type. Very hardy—the original tree has withstood the severe winter of 1917-18 in the locality where the Elberta froze out. Fruit large roundish, thick skinned, highly colored. Flesh yellow and free from pit. Pit small. Prolific bearer. Fruit very uniform in size. Ripens two weeks earlier than the Elberta, or with Yellow St. John about the middle of August.

**Stump**—Very large, roundish; skin white with a bright red cheek; flesh white, juicy and good. Season last of September.

**Triumph**—Tree a strong grower and very hardy. Fruit large, yellow with red cheek; flesh bright yellow; great bearer and good shipper. Stone nearly free when fully ripe; a very valuable early yellow peach, ripening with Alexander. July.

**Weed's Late Barnard**—Above medium size; yellow with dark red cheek; flesh yellow, red at pit, very rich; tree hardy; very small pit. Middle of September.





HOW PEACH TREES LOOK AT BUDDING TIME

The trees here shown are in process of being budded. Notice the size at which this operation takes place. In the following spring the trees are cut back and then the bud, which has lain dormant all the winter, will start its growth. Mr. Walter Greening, shown in the picture, is a well-known authority on the scientific growing of trees.

Wanted--

A Man

We do not care whether you are worth one or a million dollars; but your character must be above reproach if you act as our representative.

## APRICOTS

It is regrettable that a fruit as delicious as the Apricot, which ripens from one to two months before the best early peach, is so little known. A northern or exposed situation is preferable for the apricot as its chiefest fault is that it blossoms so early as to be caught by a frost.

By careful management the apricot may be expected to be as productive as the peach and is well worth cultivation. The varieties given are best to very best.

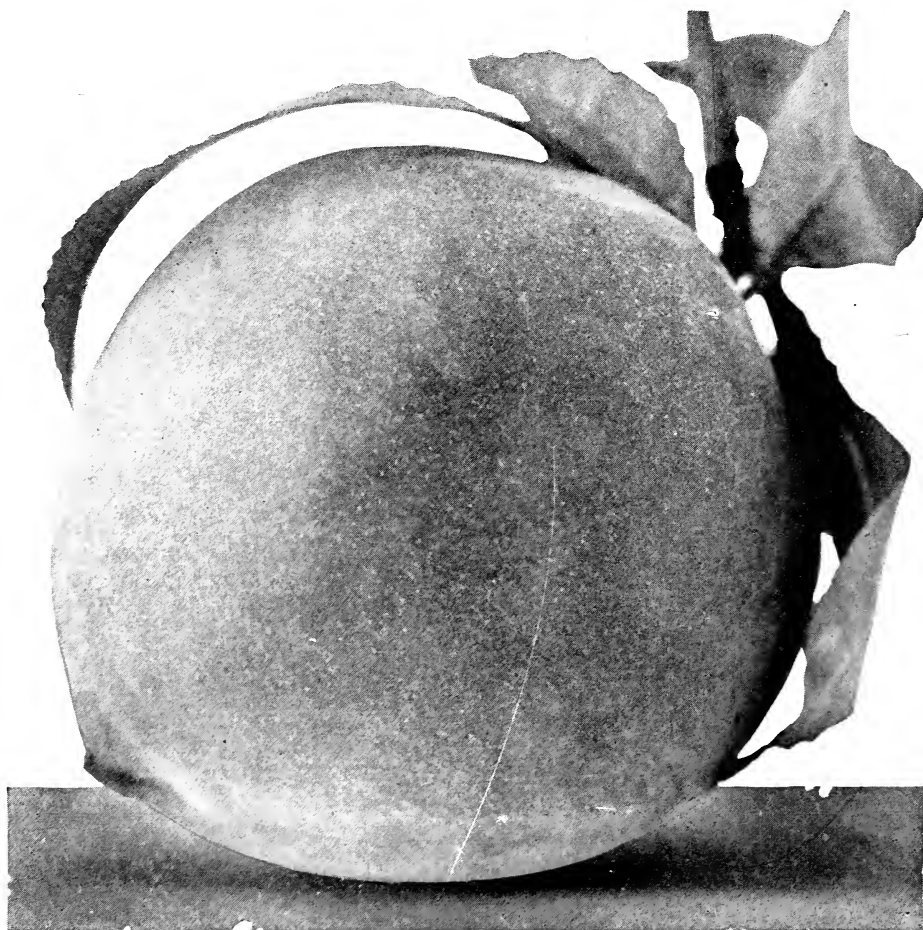
**Alexander**—An immense bearer. Fruit orange yellow, oblong, flecked with red; sweet, juicy, very beautiful. July.

**Early Golden**—Small, surface wholly pale orange; flesh orange, moderately juicy, sweet, good. Ripens about August 5th. Hardy, very productive, profitable for market.

**Montgamet**—Small. Fruit deep yellow, flesh reddish, firm with rather brisk flavor. Early. One of the best for preserving.

**Peach**—Very large. Yellowish orange with a brownish orange cheek and mottled with dark brown to the sun. Flesh rich yellow, juicy, with a rich, high flavor. Ripens about August 15th.

**Royal**—Large. Pale orange with faintly tinged red cheek. Flesh yellow, firm, sweet, highly flavored, slightly subacid and good quality. Ripens about August 10th. A good market variety.



OUR SEPTEMBER MAMMOTH PEACH



GRAND DUKE PLUM

## PLUMS

The Plum is more nearly a universal fruit than any other with the exception of the grape. Great progress has been made the last twenty years towards improving and developing the plum and in the introducing of foreign varieties. We in the United States can grow not only the true American varieties but European, Chinese, Japanese, and the Hybrids also.

It is well known that some varieties are so deficient in pollen that they do not fertilize themselves, and it is advisable, in fact a necessity, that all plum orchards should be planted of two or more varieties alternating the rows.

## AMERICAN AND EUROPEAN VARIETIES

- ✓ **Austrian Prune**—Tree very vigorous, upright, perfectly hardy, and is a young bearer. Fruit of this plum is the handsomest and largest in cultivation. Color, attractive dark reddish purple. Flesh golden yellow, sweet and mild; excellent quality. Good shipper and keeper. Ripens about middle of September. Takes highest honors and premiums everywhere. (E.)
- ✓ **Bradshaw**—Fruit very large; dark violet red; flesh yellowish green, juicy and pleasant. Tree vigorous, erect and productive. Middle of August. (E.)
- ✓ **Diamond**—A superb and showy plum of enormous size; dark purple, with thick bloom. Vigorous, hardy, productive. September. (E.)
- ✓ **German Prune**—A large, long, oval variety, much esteemed for drying; color dark purple; of a very agreeable and rich flavor. Tree very productive and hardy. September. (E.)
- ✓ **Grand Duke**—Color of Bradshaw; fruit very large, of fine quality; very productive. Tree rather a poor grower. (E.)
- ✓ **Green Gage**—Rather small, round, suture faint; surface green, becoming yellowish green, usually with reddish brown dots and network at base. Flesh pale green, melting, juicy, exceedingly sweet and rich and unequaled in flavor. Slow grower. Ripens about the middle of August. (E.)
- ✓ **Gueii**—Extensively grown for market, having proved to be one of the most profitable for that purpose. Tree a hardy, very strong, vigorous and upright grower, spreading with age and bearing; an early and very abundant bearer. Fruit large, roundish oval; skin dark purple, covered with a thick blue bloom; flesh pale yellow, a little coarse, firm, juicy, sweet, sprightly, sub-acid; freestone. Last of August and first of September. (E.)

## PLUMS—AMERICAN AND EUROPEAN VARIETIES (Continued)

**Imperial Gage**—Fruit rather large, oval, suture distinct, surface green, slightly tinged yellow, with marbled green stripe; bloom copious, white; flesh greenish, juicy, melting, rich, of very best quality, sometimes adhering but usually nearly free from the pit. Ripens August. Valuable for home use only. (E.)

**Italian Prune** (Fellenberg)—A fine late plum; oval, purple; flesh juicy and delicious, parts from the stone; fine for drying. September. (E.)

**Lombard**—Medium; round oval; violet red; juicy, pleasant and good; adheres to the stone. Tree vigorous and productive. Last of August. A valuable market variety; one of the most hardy and popular. (E.)

**Monarch**—One of the most valuable of the late introductions from England. Tree robust, with dense foliage; an abundant bearer. Fruit very large, roundish oval; dark purple-blue; perfect freestone. October. (E.)

**Pond's Seedling** (Hungarian Prune)—Very large, ovate, slightly tapering to stalk; skin thick, reddish-violet with numerous brown dots and covered with a handsome bloom; rather coarse, juicy, moderately rich. A vigorous, showy fruit. Ripens middle of September. (E.)

**Prince** (Prince's Yellow Gage)—Rather large; golden yellow; flesh rich, sugary and melting; very hardy and productive; a favorite sort. August. (E.)

**Prince Englebert**—Fruit large, oblong, oval; deep bluish-purple with dense bloom; flesh juicy, melting, with a pleasant, moderately rich and very good flavor. Freestone. End of August. (E.)



**BURBANK PLUM**

**Reine Claude**—Large; green yellow, spotted with red; firm, sugary and of fine quality; very productive. September. (E.)

**Shipper's Pride**—Fruit large; dark purple; nearly round; flesh firm and excellent; a good shipper. Tree hardy and productive. Excellent for canning. September. (E.)

**Shropshire** (Shropshire Damson)—Fruit small, oval; skin purple, covered with blue bloom; flesh melting and juicy, rather tart; separates partly from the stone. September. (E.)

**Yellow Egg**—Fruit of largest size; skin yellow, with numerous white dots; flesh yellow, rather coarse; sub-acid, fine for cooking. Tree vigorous and productive. Last of August. (E.)

**York State Prune**—Large, oval dark blue, light bloom, firm, juicy; free. Vigorous, productive; a good market plum. (American.)

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The shrubs came to me in first-class condition and make some of my neighbors' shrubs which they just purchased elsewhere look sick. Every tree and shrub is alive.—E. A. Moore, Allen, Mich.

## JAPANESE PLUMS

- ✓ **Abundance**—One of the best known and most popular of the Japan sorts. From our experience we can recommend this variety for more extensive planting. Medium to large, oblong; amber, nearly covered with bright red and overspread with a thick bloom; flesh orange yellow, juicy, melting and of delicious sweetness; stone small and flesh readily parts from it. Tree a strong grower and an early and profuse bearer. Valuable for canning and market. August.
- ✓ **Burbank**—The Burbank Plum is one of the best of the celebrated Japanese varieties. It is proving remarkably successful the country over. No other plum ever became so popular in so short a time. This is because it is practically curculio-proof and is very free from black knot. It has been fruited many years in this country and is perfectly hardy. It seems to succeed in any soil, sand, clay or loam. It can be picked just before ripe and will ripen and color up perfectly, and will not lose its flavor. Will keep fully three weeks in perfect condition after ripening. We have kept them in a cupboard in our office for thirty days during very warm weather. Abundant yearly bearer; fruit large, roundish, dark red or purplish, with thin lilac bloom; flesh amber yellow, melting, juicy with rich sugary flavor; stone small; bears second year after planting; need close pruning. First to middle of August to September.
- ✓ **Climax** (Hybrid) — Vigorous upright grower; productive as Burbank; several times larger; two weeks earlier and higher colored. Color, deep dark red; skin firm; flesh yellow, sweet, rich, fruity and of fine quality.
- ✓ **Hale**—Tree upright. Fruit medium to large, globular not pointed; skin yellow mottled and speckled with red; handsome; flesh yellow, soft, juicy, good. Cling. Mid-season. Sometimes colored poorly and drop prematurely.
- ✓ **Red June**—The best Japan ripening before Abundance. Medium to large; deep vermilion red with handsome bloom; flesh light, lemon yellow, firm, moderately juicy; pleasant quality. Tree upright spreading, vigorous and hardy; productive; ripens between Willard and Abundance. Last of July or early August.
- ✓ **Satsuma** (Blood)—Very prolific in a mixed orchard. Fruit large, round-oblong; skin dark red speckled with greenish dots; flesh very firm, blood red, cling, rather coarse, good. Excellent for canning but not good for eating out of hand. Hardy and a vigorous spreading grower. Season late and a very long keeper. (Japanese.)
- ✓ **Wickson**—Originated by Luther Burbank, of California, who says: "This variety stands pre-eminent among the many thousand Japanese varieties I have fruited." Tree hardy and an upright, strong grower, with narrow leaves; very productive. Fruit largest of the Japans, handsome deep maroon red; firm; a long keeper and a fine shipper; flesh dull yellow, meaty, of good quality; destined to become one of the most valuable plums for market; keeps fully three weeks after picking. Fruit ripens after Burbank. Tree somewhat tender in cold northern countries. Middle of September.

Macomb, Michigan, Sept. 6, 1919.

Mr. Geo. Aprill,

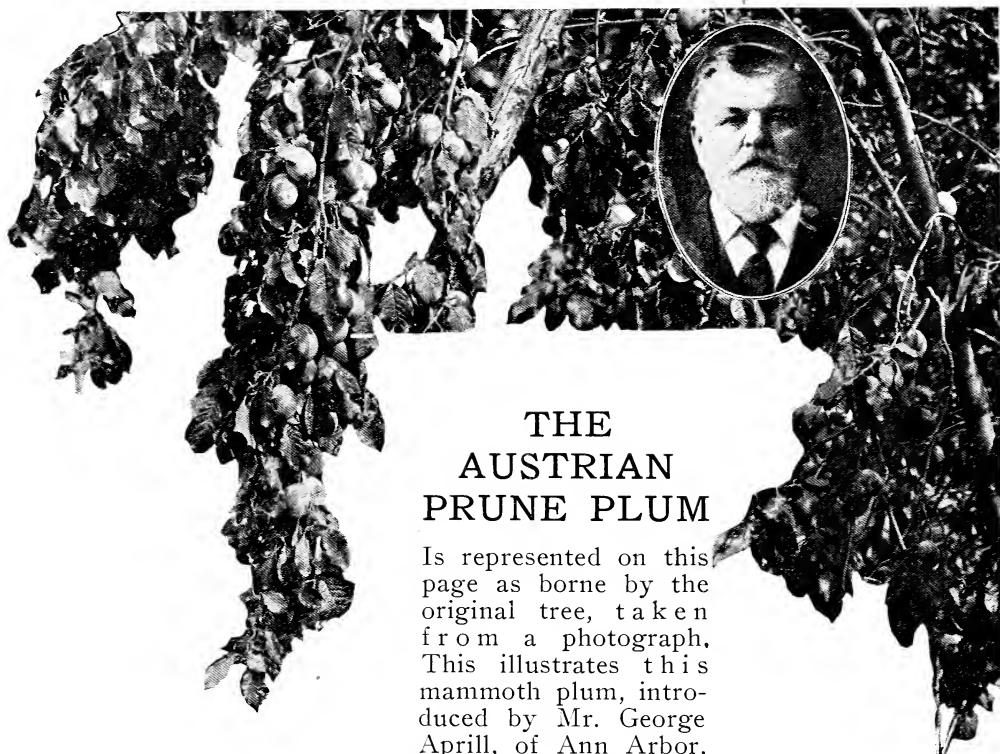
Dear Sir:

Have received your kind letter also the five Austrian Prunes. Mr. Aprill, I thank you a thousand times for the Austrian Prunes for they are certainly way beyond my expectations. I have heard so much about this wonderful Prune and have set out some of the trees but have never seen any of the real fruit of them. I have better than 1000 plum trees growing and am waiting patiently to see the Austrian Prune bear fruit. Mr. Aprill, if you ever come to this part of Michigan do not fail to stop and see me.

Respectfully yours,

W. L. SCHOOF,

No. 2 Washington, Macomb, Mich.



## THE AUSTRIAN PRUNE PLUM

Is represented on this page as borne by the original tree, taken from a photograph. This illustrates this mammoth plum, introduced by Mr. George Aprill, of Ann Arbor, Michigan, which we

have propagated with great satisfaction to ourselves and our customers.

The tree bore fruit the third year after planting and has not failed a single year since. The fruit is larger than any American or Japanese variety and the quality is extraordinary. It is a good shipper and a good keeper.

The Greening Nursery Company has made a special exhibit of this fruit at the Michigan State Fairs, where many thousand people have admired Austrian Prune Plums from the original tree. We hope to be able to fill all orders for this plum hereafter and we recommend it to planters. This plum can be had from the Greening Nursery Company only.

Mr. Charles E. Greening,      Ann Arbor, Mich., October 25, 1919.  
Dear Friend:

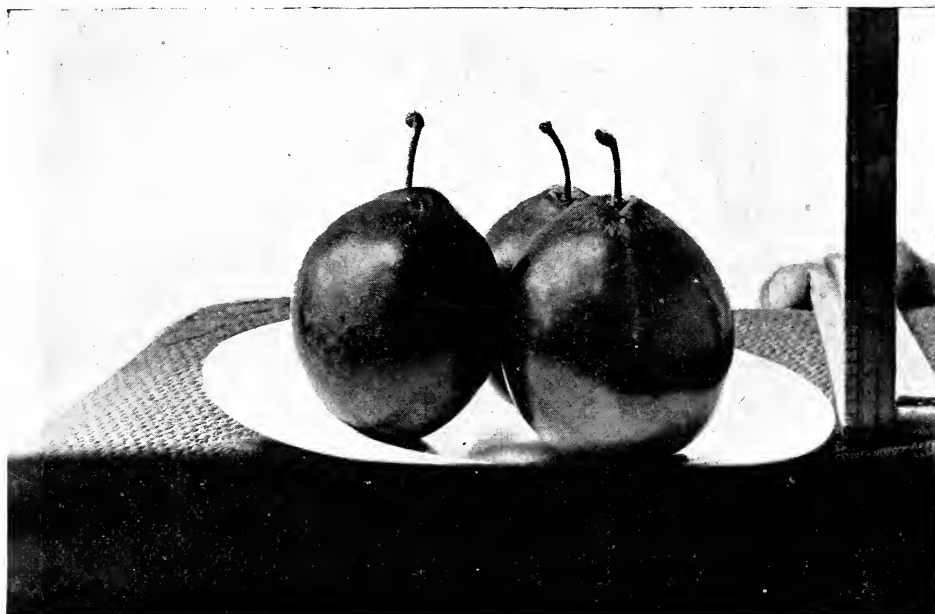
Yours at hand requesting a more complete history of the Austrian Prune. I received grafts in March, 1893. The name that this plum is known by in Austria is Bodabrad Plum, which means red and black. At the time I received the Austrian Prune, I got three kinds of plums, five kinds of pears and three kinds of apples. and out of the entire lot, nothing amounted to anything in this country except the Austrian Prune.

These grafts came from the Kaiser, or the late Emperor Joseph's garden.

I now have fourteen trees of the Austrian Plum in bearing and every tree is sound with no sign of any disease as yet. On the original tree which was grafted I got two ripe plums the second year after grafting, and that tree has borne every year since.

Many visitors come and visit me in order to see these trees when they are in fruit. This year I had many and they can vouch for the fact that little limbs the size of a lead pencil would have ten to twelve large plums on them. From this you can get a good idea as to how they bear with me.

(Signed) GEORGE APRILL.



**MAMMOTH AUSTRIAN PRUNE TAKEN FROM TWO-YEAR TREES**  
(Reduced to One-half Size)

Largest and finest flavored plum ever introduced. The original tree in America is located at Ann Arbor, Michigan, on the farm of Mr. George Aprill, who imported the scions from Austria. Our buds were taken from this very tree. See complete description in list of varieties.

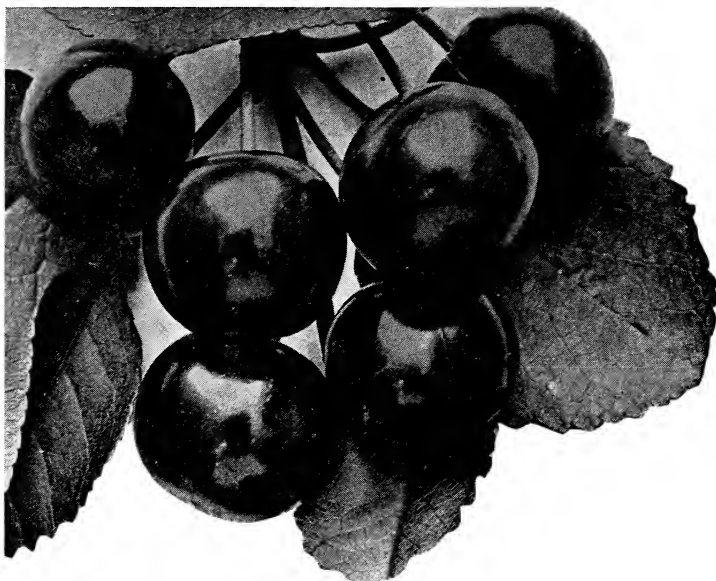
## THE MAMMOTH AUSTRIAN PRUNE PLUM

We first placed the Austrian Prune Plum on the market fifteen years ago, and we have to report the same message to growers and lovers of good fruit that we did in our last catalog—that this plum has been so successful we have not been able to produce enough of the trees to supply the demand for it:

On page 60 we reproduce a letter written by Mr. Aprill to Mr. Greening regarding the history of this great plum. Mr. Aprill is a lover of fine fruit. He sent back to his native land for some grafts simply to satisfy a hobby he had for testing out new things along the fruit line. He himself says that this is the most wonderful plum that he has ever seen, and when you take into consideration the fact that this tree has borne every year since 1895, and began bearing when the grafts were two years old, it really is worthy of more than passing consideration.

We ourselves think there is no plum in existence equal to it. Think of it, four of them here on our desk today weigh slightly more than a pound! The plum is a reddish black, with thick yellow meat and very small pit. We have specimens in the office which weigh  $4\frac{1}{4}$ ,  $4\frac{1}{2}$ , and  $4\frac{3}{4}$  ounces each. But mere size is not all—it is the most delicious plum for dessert purposes that can be had, and no other plum excels it either in hardiness or bearing qualities. Then, too, most large-sized plums are shy bearers, but the Austrian Prune is an early bearer and never fails to bear a good crop each year.

We are not willing to introduce or recommend any new variety until we are absolutely sure of its worth. We have tested the Austrian Prune Plum, therefore can recommend it to every lover of fine fruit. We prophecy that the Austrian Prune Plums will not be excelled, if ever equaled. Our supply has always been inadequate to fill the demand, as we can only cut a limited number of buds each year from the pedigreed trees we have of this strain. We are greatly increasing this, however and hope to be able to fill orders when received. In the vicinity of Ann Arbor and Monroe, this plum ripens around the middle of September.



LARGE MONTMORENCY CHERRIES

## CHERRIES

The cherry, like the grape, succeeds where many other fruits fail. It doesn't ask for favorite spots and bears almost annually. Among the hundreds of varieties cultivated in America, those given herein are the most desirable in many respects.

### SOUR VARIETIES

**Brusseler Braune**—Fruit large, globular, heart shaped; very dark red. Flesh firm, little acid, astringent; tree vigorous, prolific. Ripens middle of July. Good.

**Dyehouse**—A very early and sure bearer; ripens a week before Richmond and quite as productive and hardy. Color red. June.

**Eugenie** (Empress Eugenie) — Fruit large; dark red; very rich, tender and sub-acid. Tree heads very low. Ripe about July 1st.

**Large Montmorency**—A large, red, acid cherry; larger than Richmond, and fully ten days later; best market variety among sour cherries. End of June.

**Late Duke**—Large, light red; late and fine. Last of July.

**May Duke**—Large, red; juicy and rich; an old, excellent variety; vigorous and productive. Middle of June.

**Morello** (Eng. Morello) — Medium to large, blackish red; rich, acid, juicy and good; very productive. Tree a moderate grower. August.

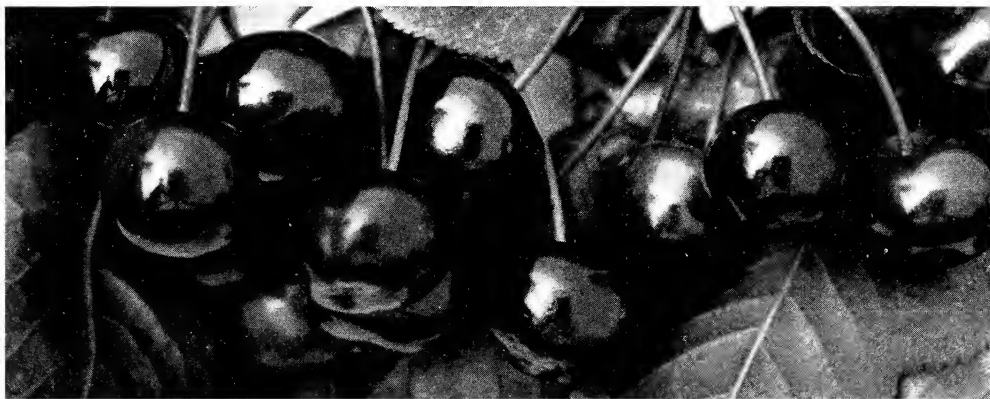
**Ostheim**—A hardy cherry from Russia. Fruit large, roundish, ovate; skin red, dark at maturity; stalk long; flesh liver-colored, tender, juicy, almost sweet. Its ripening season extends over about two weeks. Trees usually begin to bear the second year. Last of June.

**Philippe**—Large size; flesh red, tender, juicy with mild, sub-acid flavor; very vigorous and productive; of great value. A native of France. Middle of July.

**Richmond**—Medium size; dark red, melting, juicy, sprightly acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a good grower, with roundish, spreading head, and is extremely productive. The most hardy of all varieties uninjured by the coldest winters. Ripens through June.

**Wragg**—Very large, with a sweet sub-acid flavor; moderate grower. Last of July.





BLACK TARTARIAN CHERRIES

## CHERRIES (Continued) SWEET VARIETIES

**Bing**—One of the best black cherries in existence. It is large, firm and delicious, and a good shipper. Tree hardy and upright grower. Middle of June.

**Gov. Wood**—Very large; rich; light yellow with red cheek; juicy and sweet. One of the best. Last of June.

**Lambert**—A very promising cherry of largest size. Flesh red, firm and of unsurpassed quality. Stands in the lead as a shipping variety. June.

**Napoleon**—Very large; pale yellow with bright red cheek; very firm; juicy and sweet; vigorous grower and very productive; one of the best. First of July.

**Rockport**—Large; pale amber with clear red; a very excellent and handsome cherry; a good bearer. Middle of June.

**Schmidt's Bigarreau**—Remarkably hardy and productive. Fruit grows in clus-

ters, and is of the largest size. Skin deep black; flesh dark, tender, juicy, with a fine, rich flavor; stone small. July.

**Tartarian (Black Tartarian)**—Very large; bright purplish black; juicy, very rich, excellent flavor. Tree a vigorous grower and productive. Last of June or early July.

**Windsor**—New seedling originated at Windsor, Canada. Fruit large, liver-colored, quite distinct; flesh remarkably firm and of fine quality. Tree hardy and very prolific. The most valuable late variety for market or family use. July.

**Yellow Spanish**—Fruit very large, heart shaped. Color, pale, waxy yellow with handsome light red cheek to sun. Flesh firm with fine rich flavor. Season medium. One of the best and most popular.

READ THIS FROM THE SOUTH HAVEN FRUIT GROWING CORPORATION:

"South Haven, Mich., August 17, 1920.

The order of trees received from you last spring for the South Haven Fruit Growing Corporation was very satisfactory. We set 9500 trees, including apple, peach pear, plum and cherry, with a very small percentage of loss.

Yours truly,

F. E. WARNER,  
Manager."

ONE OF THE MOST SUCCESSFUL FRUIT ASSOCIATIONS  
IN THE U. S.



## GRAPES

No fruit is so absolutely universal as the grape. It is mentioned by all great travelers and historians and is found in every clime except the two extremes. The earliest settlers in the United States found it growing from Maine to Florida, and having been constantly improved, everyone can grow it who will and no home plot is too small at least for all that is needed for family use.

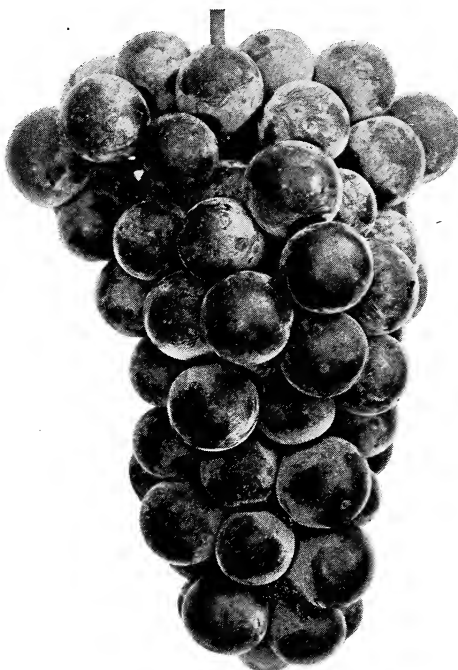
### BLACK GRAPES

**Campbell's Early**—Its strong, hardy, vigorous growth; thick, heavy, perfectly healthy foliage; very early ripening and abundant bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination equaled by no other grape. Its period of full maturity is from the middle to the last of August, according to the season, ripening with Moore's, but unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore's was decayed and gone. It is, both as to cluster and berry, of large size, of a glossy black color, covered with a beautiful blue bloom; pulp sweet and juicy; free from foxiness; seeds small, few in number and part readily from the pulp.

**Champion**—A large grape of medium quality; a strong grower and very hardy; the earliest of all. Succeeds in all sections.

**Concord**—The best known and most popular of all grapes. Best for table, wine and market; succeeds over a great extent of country. Ripens in September.

**Early Ohio**—A new black grape; its points of merit are extreme earliness, hardiness, productiveness and being of better quality than most early sorts. Berries large, firm, of spicy, pleasant flavor; hangs to the stem with a persistency that makes its shipping qualities of the highest order. Ripens about three weeks before the Concord.



CONCORD GRAPES

**Eaton**—Black; bunch and berry of the largest size; not quite so early or sweet as its parent, the Concord, but less foxy; pleasant, juicy, with tender pulp; vine very vigorous, healthy and productive.

**Moore's Early**—Bunch medium; berry round and as large as the Wilder or Rodger's No. 4; color black, with a heavy blue bloom; quality very fine; vine exceedingly hardy. It has been entirely exempt from mildew or disease; in vigor of growth it is medium. Its earliness makes it desirable for a first crop, maturing as it does, ten days before the Hartford and twenty before the Concord.

**Worden**—A seedling from the Concord, which it greatly resembles in color and appearance. It is, however, several days earlier; much more delicious and melting and has a flavor that is equaled by no other grape grown. Berries and clusters are very large and compact; vine is fully as hardy as the Concord and more productive. It is a sure bearer. A valuable market sort.



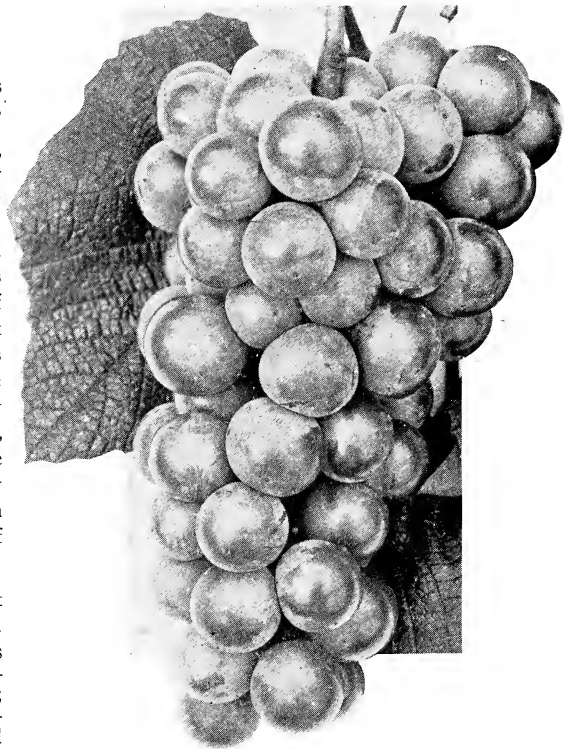
My orchard being seven years old this past spring, came into general bearing, both apples and peaches. I am pleased to state that out of over 2,000 trees, bought of you, I have not found one that is not true to name. Growers appreciate what this means. We are pruning to low tops. Please send your low top circular.

JACKSON FARMS,  
Per C. Jackson.

## GRAPES (Continued)

### RED GRAPES

- ✓ **Agawam** (Rogers No. 15)—Bunches large, generally loose, berries large, round, color dark red or maroon; flesh quite tender, juicy, vinous, with a peculiar flavor much admired by some; vine vigorous and productive.
- ✓ **Brighton**—A cross between Concord and Diana Hamburg. Resembles Catawba in color, size and form of bunch and berry. Flesh rich, sweet and of the best quality. Ripens earlier than the Delaware. Vine vigorous and hardy. This variety has now been thoroughly tested, and it may now be truly said to be without an equal among early grapes. Succeeds best when planted near other varieties of grapes.
- ✓ **Catawba**—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; two weeks later than Isabella; requires the most favorable soils and situations, good culture and warm seasons to mature.
- ✓ **Delaware**—Still holds its own as one of the finest grapes. Bunches small, compact, shouldered; berries rather small; round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous; hardy and productive. Ripens right after Brighton.
- ✓ **Salem**—Bunch large; berry large round; flesh tender, juicy, with a rich aromatic flavor; slight pulp; good keeper.



NIAGARA GRAPES

✓ **Vergennes**—Clusters large; berries large; color light amber; flavor rich and delicious; ripening here fully as early as Hartford. Its keeping qualities are superior.

✓ **Woodruff**—A handsome, profitable market sort; vine vigorous, productive. Bunch and berry large attractive; ripens early; fair quality, long keeper, good shipper.

### WHITE GRAPES

- ✓ **Diamond**—A vigorous grower; with dark, healthy foliage, entirely free from mildew. A prolific bearer; bunches large, handsome and compact slightly shouldered; color, delicate greenish-white, with rich yellow tinge when fully ripe. Skin smooth, free from specks; pulp tender, juicy and nearly transparent, with very few seeds. Berry about the size of Concord; quality best; rich, sprightly and sweet. Ripens a few days before Concord.
- ✓ **Green Mountain**—Color greenish white, skin very thin; pulp exceedingly tender and sweet; contains but one or two seeds, which separate from the pulp with the slightest pressure; quality superb. Ripens with Moore.
- ✓ **Niagara**—This white grape is justly regarded as one of the very best known; very fine quality for a table grape; very prolific, hardy and of fine flavor. Fruit keeps well if carefully handled; one of our favorite sorts.
- ✓ **Pocklington**—Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon yellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. Ripens just ahead of Concord.

## SMALL FRUIT DEPARTMENT



**PLUM FARMER**

### PLANTING SMALL FRUITS

The soil should be mellow and rich. Plant Red Raspberries 2x7 feet apart; Black Raspberries, Blackberries, Dewberries, 3x7 feet apart. Conrath and Columbian Raspberries, on account of their vigor of growth, should be planted 4x8 feet apart; Currants and Gooseberries, 4x6 feet apart; Strawberries for field culture, 1x4 feet, and for garden 2 feet apart. Plant small fruit about 2 inches deeper than they stood in the nursery, except Strawberries, which should be planted so as to leave the crown even with the

surface—too deep planting will smother the plant. Spread the roots, in planting small fruits, as much as possible, and press the earth over the roots firmly with the hand. If planted in the fall, cover with coarse straw manure to prevent the plants from being heaved out during the winter. After planting, cut back the tops to 4 to 5 inches from the ground.

### NUMBER OF PLANTS REQUIRED TO SET AN ACRE AT THE DISTANCES GIVEN ABOVE

Red Raspberries (2x7 feet), 3,111.

Black Raspberries, Blackberries and Dewberries (3x7 feet), 2,074; (4x8 feet), 1,361.

Currants and Gooseberries (4x6 feet), 1,815.

Strawberries (2x4 feet), 5,445; (1x4 feet), 10,890.

### RASPBERRIES BLACK CAPS

**Conrath**—Six days earlier than Gregg. A deep rooter and most vigorous grower. Very hardy, highly productive; color black; sweet and delicious. Being so early and large it brings the highest price in the market. All experiment stations give it the highest praise. The drought does not affect this sort on account of its deep rooting and early fruiting.

**Cumberland**—A mammoth mid-season black cap that holds its stout, stocky canes with handsome fruit. Its great glossy berries are firm enough to ship well, and of good quality. In hardiness and productiveness, among the best.

**Gregg**—Of good size; fine quality; very productive; an old reliable market

sort; fairly hardy. Well known everywhere.

**Haymaker**—We recommend this new raspberry. It is an Ohio seedling of the tall, strong-growing Columbian type, with berries similar in color size and texture, but a little more acid and produced in even heavier crops.

**Kansas**—Plant is a strong grower; fruit jet black, as large or larger than Gregg, a splendid yielder and hardy. One of the very best. Ripens before Gregg.

**Plum Farmer**—It ripens its crop in a few days and is early enough to get the good prices. Perfectly hardy is a good grower and productive. The berry is large and of a quality that makes it a good market berry.



CUTHBERT RASPBERRIES

### EVERBEARING RASPBERRY

✓ **St. Regis (Red)**—Fruit commences to ripen with the earliest and continues on young canes until October. Berries bright crimson, large size, rich, sugary, with full raspberry flavor.

Flesh firm and meaty, a good shipper. Wonderfully prolific. Canes stocky, of strong growth, with abundance of dark green feathery foliage.

### RED AND YELLOW VARIETIES

✓ **Columbian**—An improvement on Shaffer which it resembles, but the berry is firmer, adheres to the bush much longer, and retains its shape better, both on the market and for canning; color dull purplish red. Bush a strong grower attaining a very large size. One of the hardest and wonderfully prolific. Unexcelled for productiveness, stands at head for canning, making jam, jelly, etc. Should be planted two feet farther apart than any other variety.

conical, rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. The leading market variety for main crop.

✓ **Golden Queen**—This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality. Its size equal to the Cuthbert; immensely productive; a very strong grower, poor shipper.

✓ **Cuthbert**—A remarkably strong hardy variety; stands the northern winters and southern summers better than any other variety. Berries very large,

✓ **Marlboro**—Large size; light crimson color; good quality and firm. Vigorous and productive. One of the best large early berries for the North.



My brother, O. I. Gregg, whose office is at Dearborn, Mich., he being Agricultural Adviser for Wayne County, Mich., surely knew what he was talking about when he advised me to order our trees of you. Was in the garden this P. M., and the four dwarf trees you sent this spring are doing fine, and I will be very glad to recommend your nursery to my friends.

GEO. W. GREGG, M. D.,  
Canandaigua, New York.

## BLACKBERRIES

**Ancient Briton**—Very vigorous, healthy and hardy, producing large fruit; stems loaded with good-sized berries of fine quality, which ship well.

**Blowers**—Originated in the celebrated small fruit belt of Chautauqua County, N. Y. One of the hardiest, most productive, of the finest quality, and brings on the market the highest price of all blackberries.

**Early Harvest**—One of the earliest blackberries in cultivation. Habit of growth, dwarf-like; fruit medium size and good quality. Adapted only for southern climate unless protected in winter.

**El Dorado**—H. E. VanDeman recommends this variety thus: "This berry was noted last year, and is of much promise." It is an oblong, irregular berry of large size, fruiting in pendulous, slender, hairy spikes with few thorns. Color, black; flesh deep crimson, with tender core; flavor sweet, rich quality and very good.

**Erie**—Very large, jet black and early. Perfectly hardy, a strong grower and a great bearer, producing large, sweet berries; earlier in ripening than any other sort.

**Mersereau**—Large oval, sparkling, black, sweet, rich and melting. Hardy and productive.

**Rathbun**—Very large, jet black, without hard core; small seeds, extra fine quality; very rich aroma. Plant suckers very little. Very hardy. Ripens early.

**Snyder**—Extremely hardy; enormously productive; medium size; no hard sour



**ERIE BLACKBERRY**

core; very few thorns and they are nearly straight and short. One of the hardiest sorts and most profitable for market.

**Wilson**—Large, sweet, fair flavored; very productive; ripens up the fruit together; requires protection in some localities.

Mr. Charles E. Greening:

I am indeed pleased to receive this morning the photographs of the R. A. Stranahan estate, showing the wonderful condition of the planting in its second year's growth. The work of the Greening Company, particularly your personal touch in connection with this work, cannot receive too high words of appreciation from all of those connected in any way with the final outcome at the Stranahan home in Ottawa Hills.

HARRY W. WACHTER,

Toledo, Ohio.

The trees you sent me are doing nicely, could not do better. They leafed out in due time and are growing rapidly and have a very healthy look. Only sorry I have not room for more.

E. O. MILLER,

Mt. Vernon, Ohio.

## DEWBERRIES

The Dewberry is much like the Blackberry in fruit but the canes are trailing. It fruits earlier than the blackberry and prolongs the blackberry season. The canes should be cut out as in blackberries, but the growing canes should be tied to a stake, one stake to each hill, while cultivating during the summer, cutting the cords in late fall and allow the canes to lie on the ground for winter protection. This also facilitates the picking.

Just at present, growers of Western Michigan say the dewberry is the most profitable crop they can raise and deserves more than passing attention.

The Lucretia, which we describe below, is by far the best. It is delicious.

✓ **Lucretia**—One of the long-growing, trailing blackberries; in earliness, size and quality it equals any of the tall-growing sorts. Valuable for home use. The plant is perfectly hardy, healthy and remarkably productive, with very large, showy flowers. The fruit, which ripens early, is often one and one-half inches long by one inch in diameter, soft, sweet and luscious throughout, with no hard core. It has proven highly satisfactory wherever tried and many say it is the best of all the blackberry varieties for family use.



**LCRETIA DEWBERRY**

My two sons have placed an order with your Mr. Bortz today for 1500 trees which they will plant in the spring, 1920. I am proud to say that I am the owner of 8,000 trees, all of which were bought from your Company and they are satisfactory.

JOSEPH SMELTZER,

Elberta, Mich.

I have been a customer of yours and expect to repeat. Will you please send me your pamphlet on insecticides and spraying?

G. W. HILL,

Lombard, Ill.

The apple trees I purchased of you last spring came in first-class shape, have made an elegant growth. I will need a couple hundred more for next spring.

L. C. HARGER,

Farmington, Mich.

## CURRENTS

Mr. John J. Thomas, in his American Fruit Culturist, says: "The currant, from its hardiness, free growth, easy culture, great and uniform productiveness, pleasant flavor, early ripening, is one of the most valuable of our summer fruits."

Properly cared for, the currant is one of the most profitable small fruits that can be grown. It does well in the shade, therefore invaluable for intercropping. The varieties we catalog have all been tested and are good.

**Champion** (Black Champion)—A variety from England now well tested in this country and pronounced everywhere to be the best black currant yet introduced. Very productive, large bunch and berry, excellent quality, strong and vigorous grower.

**Cherry** (Red)—Very large; deep red; rather acid; bunches short. Plants erect, stout, vigorous and productive.

**Crandall** (Black)—A native black seedling of the western wild currant; distinct from the European black varieties and without their strong odor; wonderfully productive, a strong, vigorous grower, usually producing a crop next year after planting; easily picked; can be shipped farther and kept longer than any other small fruit, free from all attacks of insect enemies.

**Fay's Prolific** (Red)—Extra large stems and berries, uniform in size, easily picked, of medium growth and productive.

**Lee** (Black)—A new English variety. The fruit is large and of superior quality; the bush is a vigorous grower and enormously productive, rendering it very profitable.

**London Market** (Red)—For many years this variety has been fruiting in Michigan, where it is now planted extensively and regarded as the best market variety of that great fruit State. Plant is extremely vigorous, with perfect foliage, which it retains through the season; an enormous cropper.

**Naples** (Black)—Very large; black, rich, tender, and excellent for jellies and wine; very productive.

**Perfection** (Red)—A cross between Fay's and the White Grape, retaining the valuable characteristics of both. Beautiful, bright red; as large or larger than Fay's, holding its size to the end of the bunch; easy to pick, a superior bearer, less acid and of better quality than any other large currant in cultivation.

**Red Cross**—Large red berry, long clusters and the stem long with fruit at stem; flavor mild, sub-acid, excellent



WHITE GRAPE CURRANT

mid-season. Growth vigorous, productive. Valuable variety.

**Versaillaise**—Large; red; bunch long; of great beauty and excellent quality. One of the finest and best of the large sorts.

**Victoria** (Red)—A splendid variety, ripening two or three weeks later than Cherry, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size, brilliant red and of the highest quality. The greatest bearer of all currants.

**White Grape**—Very large; yellowish white, sweet or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very productive.

**Wilder** (Red)—A new red currant, with large, fine-flavored fruit of a bright, attractive red color, even when over-ripe. The leading garden and market variety; a strong, vigorous, erect grower and a great yielder. Fruit as large as the largest; a good shipper.





THE DOWNING GOOSEBERRY

## GOOSEBERRIES

**Chautauqua**—Size very large; fruit a beautiful light yellow color; quality good. An American seedling.

**Columbus**—An American seedling of the English type; large size; color greenish yellow, smooth, and of fine quality; a strong grower, with large glossy foliage. New.

**Downing**—Fruit is much larger than the Houghton; roundish; light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored. Vigorous and productive. The most valuable American sort.

**Houghton**—A vigorous American sort; very productive. Fruit medium, roundish, smooth, of a pale red color;

tender, sweet and of a delicious flavor; very profitable for canning and catsup.

**Red Jacket**—A new red berry, larger than Downing; smooth, very prolific and hardy, quality and foliage the best. For years it has been tested by the side of the best American and English sorts, and is the only one absolutely free from mildew either in leaf or fruit. Promises to be the variety we have so long been waiting for, equal to the best English kinds, and capable of producing large crops under ordinary cultivation wherever gooseberries can be grown.

**Smith**—From Vermont. Large; oval; light green, with bloom; flesh moderately firm, sweet and good. Vigorous grower.

## ASPARAGUS

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well-rotted barnyard manure. Place the plants eight inches apart in rows four feet apart. Spread out the roots in a trench made deep enough to permit their crown to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and three pounds of salt per square yard early every spring. Do not cut for use until second season.

**Conover's Colossal**—This variety is much superior in size and quality to any of the old common sorts, being remarkably tender and fine flavored.

**Palmetto**—Until recently we believed that the Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder, and more even and regular in its growth and that it will eventually supersede the old favorite. It has been tested both North and South and has proven entirely successful.



The order I gave you arrived in excellent condition, and all are growing fine, and am more than pleased with the Quality of Shipment for you certainly sent me a Select Shipment of Shrubbery. I certainly can recommend you to any prospective buyers.

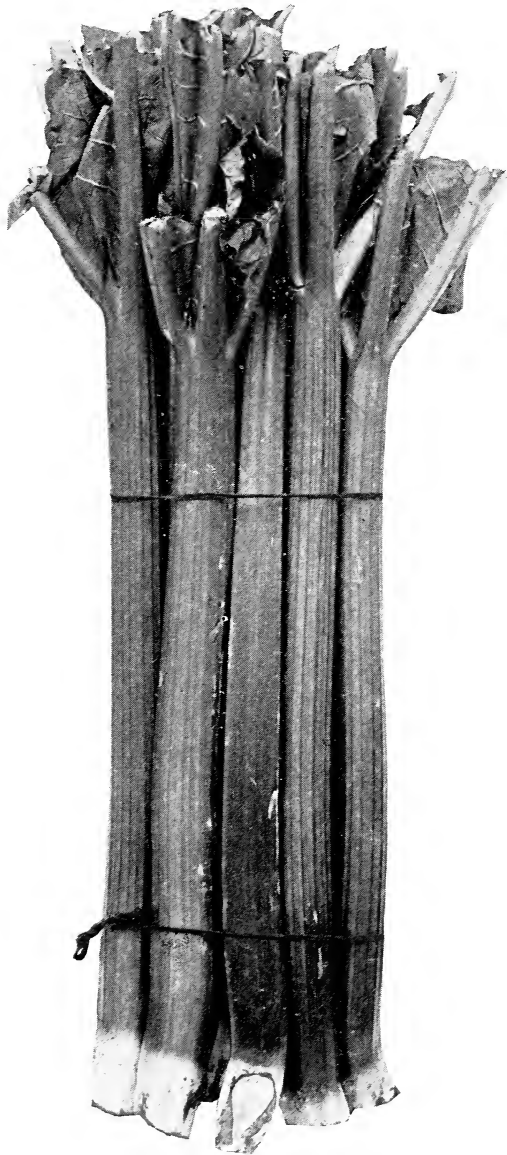
A. W. MELVIN,  
Quincy, Ohio.

## RHUBARB OR PIE PLANT

Make the ground rich and deep as recommended for Asparagus. Plant four feet apart each way.

**Early Scarlet**—Smaller than Myatt's, but extremely early and of very highest quality. The best extra early sort for home or market.

**Myatt's Linnaeus**—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early tender variety without being in the least tough or stringy, with a mild, sub-acid flavor.



**RHUBARB**

### What They Say About Greening's Stock and Service

We are pleased with stock sent.  
JOHN P. BOWER,  
Attorney,  
Rushsylvania, Ohio.

I am well pleased with my grape  
vines.  
W. RUCHISLIEU,  
Carleton, Mich.

Received the peach trees I ordered  
and they were packed just fine.  
JOSEPH SILHAVY,  
Decatur, Mich.

The trees I ordered from you are in  
good shape.  
W. BENSTEAD,  
Dafoe, Mich.

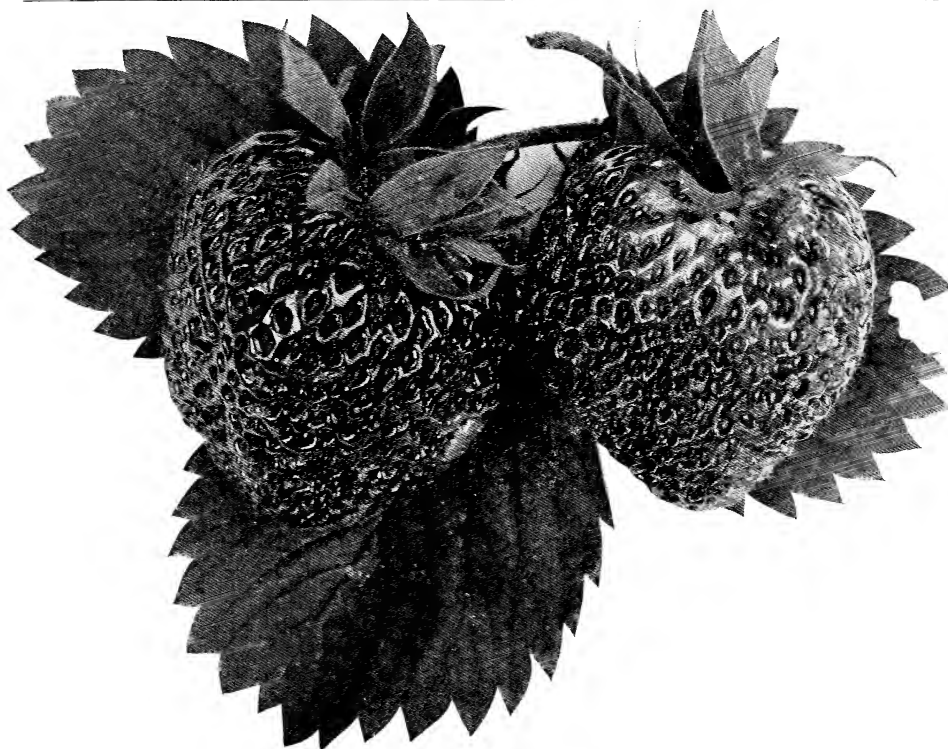
The nursery stock ordered through  
your agent was beyond my expecta-  
tion. It was simply grand.  
JOHN J. BAUMGARTENER,  
Fillmore, Ill.

I thank you for sending my trees in  
such good condition.  
MRS. CHARLES AUSTERBURG,  
Concord, Mich.

Those trees you sent me arrived in  
good condition.  
F. M. BERGIN,  
Brighton, Mich.

Our man, who has been in the busi-  
ness for thirty years says these trees  
received from you are the best he has  
ever received. I am glad to say we  
are well pleased with them.  
LUCE & MOXLEY,  
Per Henry O. Moxley,  
Shelbyville, Ky.

I bought a bill of trees from your agent three years ago and am so well pleased  
with them I want some more. They are the finest looking trees in the neighborhood.  
C. S. ORNDORFF,  
Norwich, Ohio.



THE BRANDYWINE

## STRAWBERRIES

In 1483 the garden of the Bishop of Ely at Holburn, England, was celebrated for its excellent strawberries. In the days of Pliny, one of our earliest writers, this fruit is mentioned as having been relished by young and old. Virgil wrote of the strawberries when Rome was in her hey-day. Centuries have passed and the strawberry has been improved so much that the writers referred to above would not now recognize it.

There are literally hundreds of varieties and most of them are good under certain conditions. We list all the really valuable sorts such as we would plant ourselves. You will not go wrong in planting any that we catalogue and you will not be "chasing rainbows" when you plant the new Everbearing varieties. In our opinion, the Progressive and the Superb are the best of these.

### COMMON OR JUNE VARIETIES

✓ **Brandywine** (Per.)—Season medium to late. One of the grandest berries ever introduced. It is one of our favorites. It is one of the heaviest fruited and a splendid shipper. Berries very large, deep red to center. Stems short and stout and holds its great load of berries well up from the ground. One of the strongest pollenizers for pistillates of the season.

form size, fine form and color, good quality of fruit, unsurpassed productiveness and great vigor of plant. It ripens almost as early as the Crescent, continues about as long in bearing, and fully as prolific; leaves large, dark green, and endure the hottest sun perfectly. The leading market variety. Succeeds best on heavy soil.

✓ **Bubach** (Imp.)—Combines many excellent qualities, such as great and uni-

**Clyde** (Per.)—This is perhaps the most popular new strawberry ever introduced, seeming to do equally well in

## STRAWBERRIES (Continued)

all parts of the country. The Clyde ripens early, is as large as Bubach and much firmer. The plant is very vigorous and healthy, foliage light green in color.

**Crescent (Imp.)**—Large, averaging larger than Wilson's Albany; conical; color a handsome bright scarlet; quality very good. In productiveness unequaled, having produced over 400 bushels per acre. Plants very strong and vigorous; a most valuable market sort.

**Cumberland (Per.)**—Very large, round; of good quality; pale scarlet; soft. Excellent for home use. Early to late.

**Dunlap (Senator Dunlap) (Per.)**—Medium to large, flattened slightly. Dark crimson. Flesh red, firm and fine in texture. Quality excellent. Plant hardy and strong grower.

**Excelsior (Per.)**—Another early sort of great promise from Arkansas. It is an excellent grower of good, clean foliage, making large, stocky plants, which is one of the main business qualifications of the strawberry. Earlier by several days than Michel's Early. It does well on light sand or heavy land. The berry is dark red, nearly as dark as Warfield; of good size; one of the best shippers; will stand as much handling as the old Wilson without bruising. It is a good plant maker, medium in size and perfectly healthy; blossom perfect.

**Gandy (Per.)**—Unsurpassed in growth and healthfulness of foliage. Berries bright crimson color, uniform size and shape, large, ripens late and are very firm. Produces a crop of berries the first season plants are set. Latest of all. A profitable market sort.

**Gibson (Per.)**—One of the best and most profitable sorts for both home and market. Plants are strong growers with long roots and abundant foliage, exceedingly productive. Berries extra large, choice flavored, dark glossy red, clear through.

**Haverland (Imp.)**—The most productive large berry under cultivation. Season medium early until late. Plants are very large, healthy, vigorous, and ripen their fruit evenly and early, holding on through the season. Berries are fine, uniform in shape, very large; excellent flavor and bright red.

**Jessie (Per.)**—On moist soil is a robust healthy plant; long, stout fruit stalk, holds the fruit well up from the ground; berries of the largest size, medium to dark red color all the way through; firm and solid, and of the most excellent quality; very few small berries and none of the largest ones of irregular shape. Season medium.

**Michel (Per.)**—Long been known as the extra early berry. It should always be grown in hedgerow, when it is very productive. It makes runners very freely, and many have propagated in beds so thickly that light was excluded and thus it lost its tendency to form fruit buds. Berries medium size, cone shape and a good shipper.

**Nick Ohmer (Per.)**—The fruit is of the very largest size. It is dark, glossy red, firm and excellent flavor. Medium to late.

**Parker Earl (Per.)**—Plant robust and healthy; withstands changes of climate; berry regular, conical, medium size, glossy crimson; flesh firm; a good shipper; season medium. Succeeds well on rich, loamy soil. We can highly recommend it for general culture.

**Sample (Imp.)**—Large size; midseason, fine quality; conical shape and regular in form. One of the best for market.



SENATOR DUNLAP

## STRAWBERRIES (Continued)

**Sharpless** (Per.)—Very large; average specimens, under good cultivation, measuring one and one-half inches in diameter; generally oblong, narrowing to the apex; irregular, often flattened; clear, light red, with a smooth, shining surface; firm, sweet, with a delicious aroma; vigorous, hardy and very productive when raised in hills with runners cut off.

**Tennessee Prolific** (Per.)—Medium size, long, bright red, fine grained and juicy. Early and abundant bearer.

**Warfield** (Imp.)—The greatest market and shipping berry. A deep rooter, and can mature an immense crop; berries above medium in size, dark red to the center, and one of the best canning and shipping berries grown.

**Wilson** (Per.)—Medium to large; dark red; very hardy, vigorous and productive. Succeeds best on heavy soil. One of the most widely known and universally successful. Season early to late.

## EVERBEARING STRAWBERRIES

The Everbearing Strawberries are no longer an experiment. They have come to stay. There are many varieties and more being offered every day, but after a continuous test since they were first brought out, we offer only two and these are the best of their class. Each are practical croppers—bring profitable prices on the market. But if one wishes the largest size and richest quality of fruit in the fall, the blossoms must be picked off until about the first of August.

**Progressive**—This is by far the best Everbearing; although not so large as the Superb, it is considered of superior quality and in our opinion is best. Fruit is of good size and good color. Plants are very vigorous and healthy, giving splendid pickings of high quality berries for a long time. Fruit from the middle of July to middle of November, according to season.

**Superb**—This is one of the largest, if not the largest Everbearing sort. The plants are strong and stand the weather well. Fruit is very large, rich deep red; glossy and attractive. Fruit season July 15th to November 15th, according to season.

## MULBERRIES

**Downing's Everbearing** — Very large, black, handsome, sweet, rich and excellent.

**New American**—Equal to Downing's in all respects and a much hardier tree. Vigorous grower; very productive; the best variety for fruit; ripe from middle

June to middle September.

**Russian**—Very hardy; vigorous grower; valuable for feeding silkworms, etc. Fruit of small size, varies in color from white to black. Largely planted for hedges, windbrakes, etc., in Western States.

## NUT TREES

**Butternut**—This is a large nut-bearing tree. Makes handsome specimen tree for any purpose. Nuts the most delicious of all nut-bearing trees.

**Chestnut, American Sweet**—A valuable native tree, both useful and ornamental; timber is very durable and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor and are a valuable article of commerce. Best adapted for sandy or gravelly soil.

**English Filbert**—Of easy culture, growing 6 to 8 feet high, entirely hardy and one of the most profitable and satisfactory nuts to grow. Succeeding in almost any soil, bearing early and abundantly; nuts nearly round rich and of excellent flavor. Admired for dessert.

**Pecan**—This is a native nut belonging to the (Carya) Hickory Nut family. The tree is of tall growth and bears abundantly. The shell is very thin, the kernel sweet and delicious.

**Walnut, Black**—This is the most valuable of all of our timber trees for planting; a rapid grower, producing a large nut. The timber enters more largely into the manufacture of furniture and cabinet ware than almost any other, and is prized almost with mahogany.

**Walnut, English**—The well-known English walnut of commerce. Hardy as far north as New York. Makes a handsome, spreading tree. Nuts are delicious. Not so hardy as the Japan walnut.

**Walnut, Japan** (Siebold's Japan) — A most valuable species, which on account of its hardiness and vigorous growth is well adapted for our country. It grows with great vigor and is one of the best shaped trees for ornament and shade, without particular pruning or care. One of the most valuable of any nut for our country use.

"For An America More Beautiful"

## LANDSCAPE DEPARTMENT



**T. CLIFTON SHEPHERD, JR.**  
Professional  
Landscape Designer



**CHAS. E. GREENING**  
President  
The Greening Nursery Co.  
Consulting Architect



**CHAS. M. ANSPACH**  
Artist and Draftsman

Today, the art and science of landscape gardening is of great importance to every land-owner, it matters not whether the property be a small city or suburban lot, a vast estate or the farm. Home surroundings can be vastly improved and values greatly enhanced by judicious expenditure in landscape work. There is no one feature that more fully indicates the home of refinement than the surroundings of the dwelling.

The practical man fully realizes all this, and that if he improves his property with trees and shrubs—to satisfy his longing for beautiful home surroundings—he has increased its value fully 50 per cent besides leaving a rich heritage to his family for generations to come.

Not only does the owner receive unbounded happiness and pleasure, but every passer-by shares in it. Home-owners who beautify their grounds are public benefactors because the city beautiful only comes from individual effort. Thus cities make communities and communities make the nation. Therefore the development of the home is more than a local matter—it is a matter of national concern.

### The Real Home

In these days a modern dwelling costs a great deal of money. Much of the cost is incurred for beauty's sake. It is only human to love beautiful surroundings these make for a more noble life.

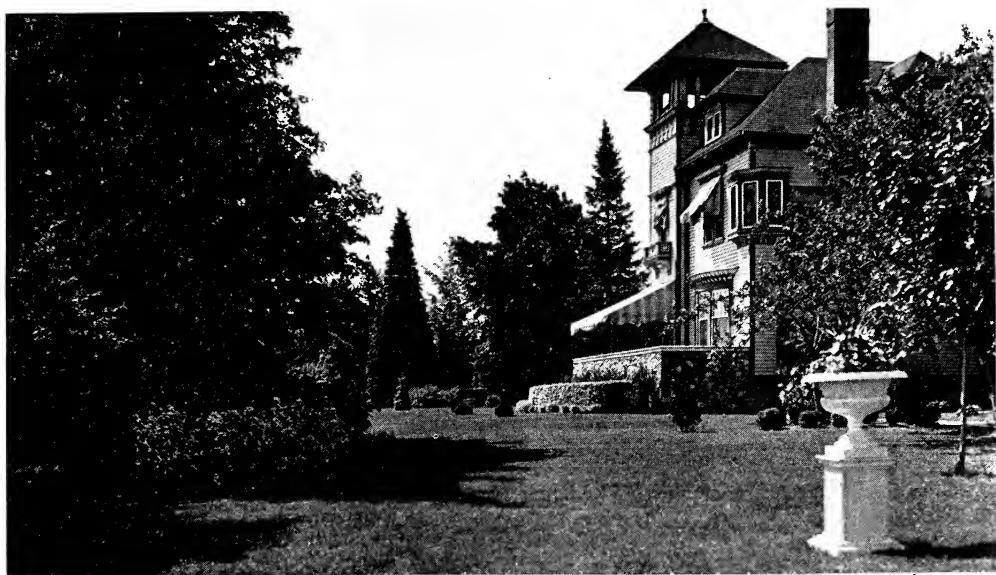
But it is a regrettable fact, that many who are very particular about the finish of a house and its interior appointments, are utterly indifferent to the outlook from their windows. They will spend considerable money for pictures and other decorations, not thinking how small an investment is needed to make a living picture of their own home. As a matter of fact, nearly one-half the money we spend on our houses is for beauty. The question is: At what point should we cease our expenditures for decorative improvements? Having spent 50 per cent extra on the house itself would an outlay of 5 per cent on the grounds be extravagant?

Do you not know that the small expenditure for landscape improvement is the only investment you make in or about your home that continues to appreciate? Do you not realize that the house and its appointments begin to depreciate the more you begin to use them? Do you not know that the same sun and the same rain that caused the house to deteriorate are your garden's dearest friends?



Those shrubs and bushes I received from you were certainly shipped in fine shape and came through splendidly. They were the best bunch of shrubs I ever saw for coming right up to specifications. I want to thank you for the way you took care of the order for me.

**HUGH H. HARRIS,**  
Adv. Mgr., The Fruit Belt,  
Grand Rapids, Mich.



HOME OF PAUL H. HOEFT, ROGERS CITY, MICH.

### The Basic Principles To Be Observed in the Home Beautiful

The art of landscape architecture is based on certain principles that are applicable to all grounds, large and small. It should be understood at the outset that it is just as easy or just as difficult to lay out small grounds as large, for the same principles are used in both; with this exception, that on small grounds the lines should be drawn with more care. The little home can be made just as charming in its way as the spacious grounds of a lordly estate. In landscape work no hard and fast rules can be laid down. Every place presents conditions peculiar to itself and requires individual treatment. There are two general kinds of garden composition: the informal or natural, and the formal or geometrical. Each of these two styles has its admirers and each finds its place in the scheme of beautifying according to local conditions and the requirements of the particular case.

### Plans for Beautifying Your Home

Should you wish to plan your own improvements you can, of course, select and order your material from this catalog. We will gladly give you quantity prices on the things you intend using. If, however, you desire that we should draw plans, submit suggested planting list and hand'le your work from start to finish, we will be glad to do so. Our Landscape Department is complete. We are fortunate in having associated with us Mr. T. Clifton Shepherd, Jr. who is the past master in this art. His wide experience and wonderful ability is shown in every home and estate he has beautified and the commendations printed herewith are only a few of the many expressions of satisfaction we have had from our patrons. If you do not feel competent to beautify your home grounds and wish to secure our services, a letter will bring by return mail all the necessary information.

In a letter dated July 12, 1917, Miss Bina M. West, of Port Huron Mich., says:

*"I had intended to write expressing my appreciation of the most excellent work done by Mr. Shepherd in landscape gardening here. Everyone has commented on the beauty of the plan and the splendid condition of the vegetation. We feel very much pleased indeed with the service given by your Company, not only in the matter of my own personal work, but around the building of the Woman's Benefit Association. The trees are very nice indeed and the plan has been beautifully and efficiently carried out by Mr. Shepherd.*

*I cannot speak in terms of too high praise of your firm and the manner in which your representative has treated us in handling these orders.*

*Very truly yours,  
(MISS) BINA M. WEST."*



#### BUNGALOW (5-BH)

Regarding the planting about the cozy home above, Mr. Shepherd has this to say: "A setting worth while and appropriate, which adds to the coziness of this bungalow home. Note how effectively the house is blended into its resting-place by the breaking of the angle at the intersection of house and ground. This same effect can be produced by the use of the following stock: No. 1 *Lonicera Tatarica* Rosea; No. 2, *Berberis Thunbergi*; No. 3, *Spirea Van Houttei*; No. 4, *Diervilla Florida* Rosea; No. 5, *Climbing Rose*, *Crimson Rambler* or *Dorothy Perkins*; No. 6 *Philadelphus Lemoinei*; No. 7, *Philadelphus Coronarius*; No. 8, *Berberis Thunbergi*; No. 9 is *Spirea Van Houttei* and No. 10 is *Cydonia Japonica*."



#### No. 13 (BH)

This planting is very simple and in good taste. The vines on the porch are *Ampelopsis Veitchi*, or *Boston Ivy*, and those at the right bearing the tiny white flowers are *Clematis Paniculata*. The border is *Barberry Thunbergi*. Note how graceful in form when let grow naturally without shearing. The early fall coloring of the vines and barberry will be very striking by its brilliancy, followed by the scarlet berries of the barberry and black berries of the *Boston Ivy* and the white fluffy seed pods of the *Clematis*.



**No. 20 (BH)**

An ideal planting before an ordinary house. It is incomplete, however, and we suggest continuing the planting around the foundation at the right of the picture to the far side of the bay window, terminating midway between the house and tree with three shrubs, using either *Lonicera Tar. Rosea*, *Philadelphus Coronarius* or *Grandiflorus*, *Diervilla Rosea* or *Spirea Van Houttei* planted in triangular form with point to the front.

**No. 6 (BH)**

An excellent planting for fall color effect. No. 1 is *Hydrangea Paniculata Grandiflora*; No. 2 is *Barberry Thunbergi*, and No. 3 is *Ampelopsis Veitchi*, or Boston Ivy.



51-A—BEFORE PLANTING

**Mr. Home-  
Owner:**

Perhaps we can best impress on your mind how quickly and thoroughly our Landscape Department can solve the making of a house into a real home by showing a photograph taken of the home of Mr. F. W. Ruggles, formerly President of the Republic Truck Company, Alma, Mich. The view 51-A, Before Planting, will give you an idea of house and grounds immediately after the house was finished.

Our Landscape Department took the work in charge and the photograph below was taken ten weeks after the one above. For a better view of Mr. Ruggles' home and the condition of growth in 1920, we refer you to our "Beautiful Homes," which also contains much other interesting matter relative to the beautification of homes and grounds.



51-F—TEN WEEKS LATER



We print the photo above because it shows civic pride and a desire of these home-owners to improve their properties. How much more beautiful this is than if there had been specimen shrubs, Catalpa Bungeis and Geranium beds put in the lawns between walks and house line.

The trees between walk and curb are *Ulmus Americana*, or American Elm, and each succeeding year will see a marked improvement of beauty until finally this street will be indeed beautiful as the Elms will arch the street and the lawns improve with age.

Nature never hurries. It takes time to achieve effects in landscape development, but the residents of this street have builded wisely and well. Their street will improve yearly and their investment grow into dollars because of their good taste.

I received the cherry trees and found them in fine condition. I don't believe that any better trees ever arrived in this place, at least that is the sentiment of all who have seen them.

BURL BUTLER,  
Shelby, Mich.

Although trees were somewhat delayed arrived in fairly good time and am pleased to report that they are doing fine.

W. C. GREEN,  
Cincinnati, Ohio.

Find enclosed check. We delivered Saturday. Everyone was well pleased. Roots in nice condition. You can look for the sales to double next year.

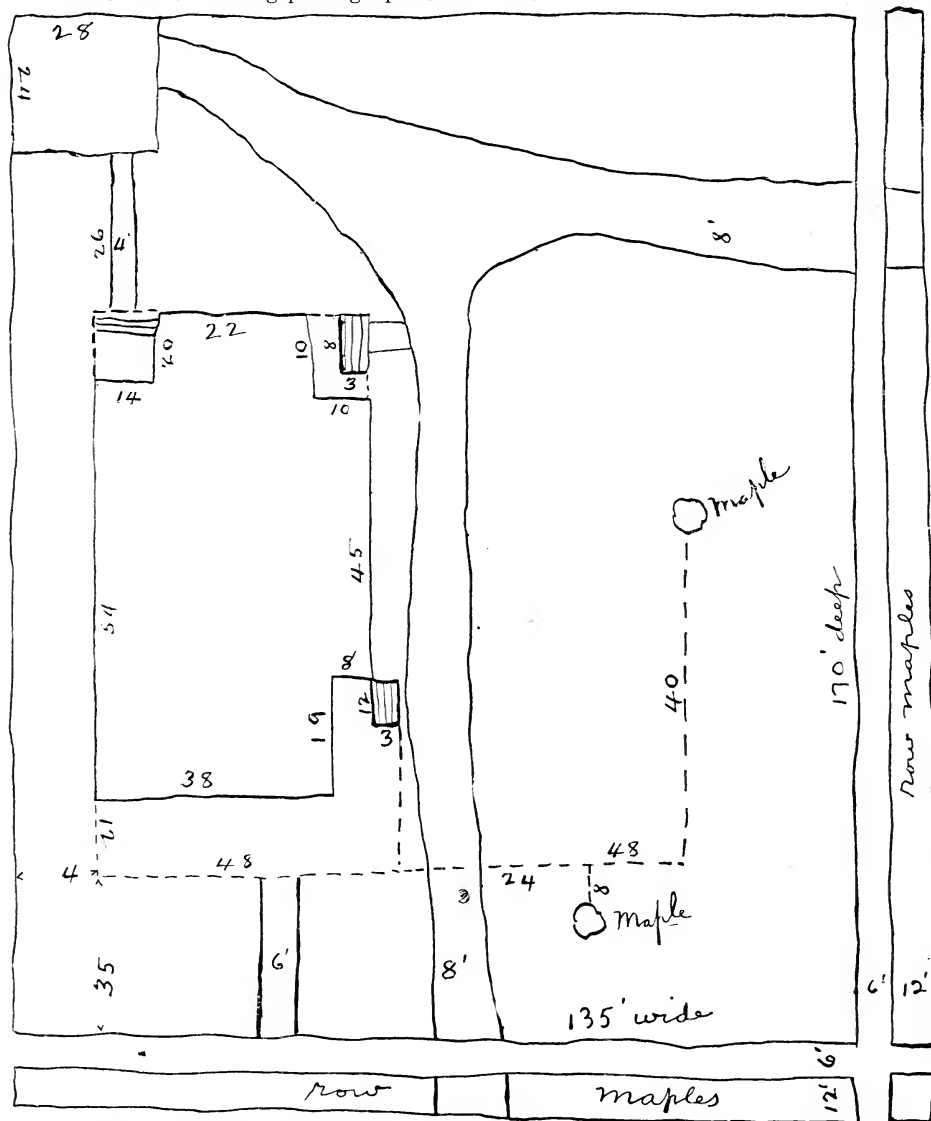
J. A. CONLAN,  
Chelsea Mich.

## The Making of Houses Into Real Homes

This is a feature of our Landscape Department which is being taken advantage of by our patrons more and more as they learn how small the expenditure is that is necessary. Let us assume you wish to beautify your home grounds. You are at a loss to know just **what** to plant, **where** to plant it or just **when** and **how**!

One of our clients sent in the sketch below. This is a very simple thing to do, but the measurements should be exact.

Here is the drawing photographed as sent us:



ROUGH SKETCH SENT US BY CUSTOMER FOR SMALL LANDSCAPE JOB

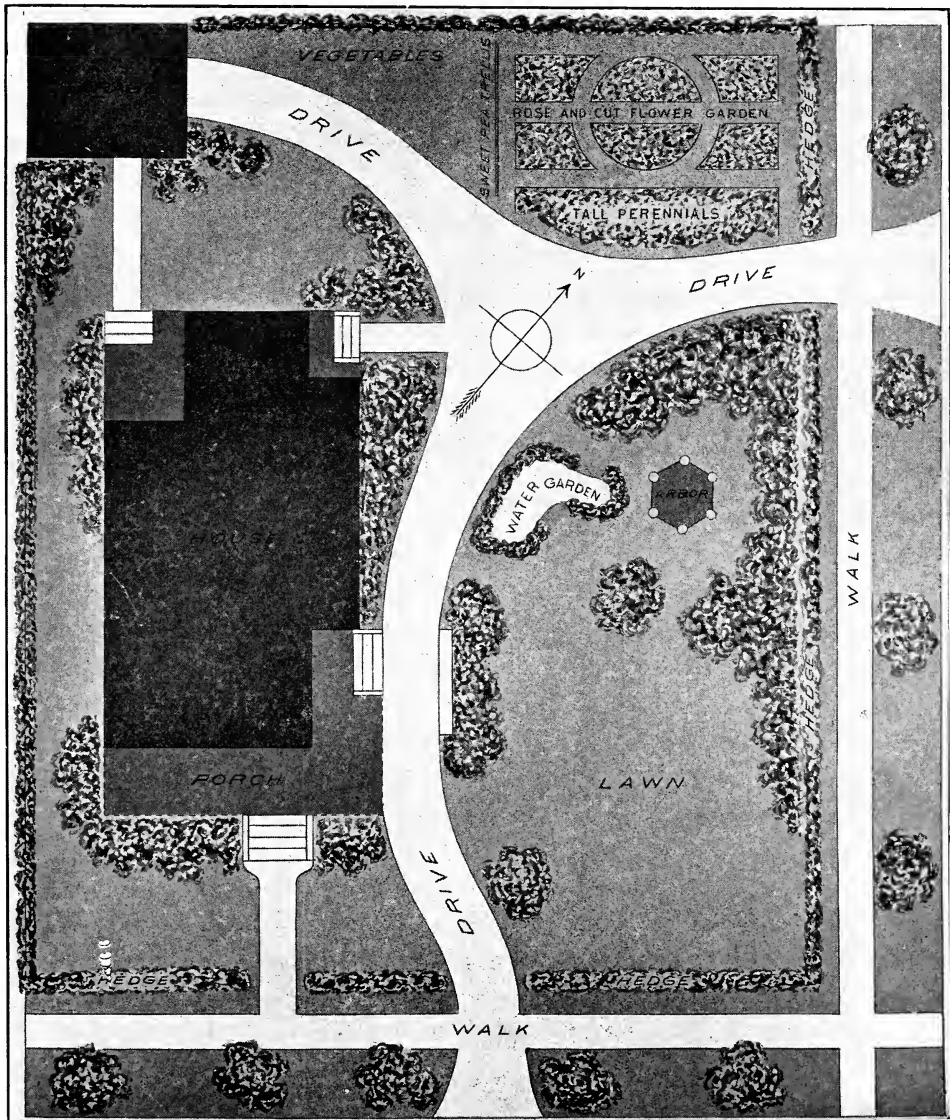


In reply to your inquiry regarding Steele's Red apples, will say I consider them one of the most valuable varieties in my orchard. They bring more money and are excellent keepers.—F. P. Simons, Northville, Mich.

The stock was very satisfactory and I hope that I will sell enough next season to make a carload.—A. W. Lindow, Shelby, Mich.

## THE MAKING OF HOUSES INTO REAL HOMES (Continued)

From the sketch shown on preceding page our Landscape Department made a blueprint or actual plan for the grounds. Note that everything is shown. In addition to this, we furnish a planting key showing where to locate each tree, shrub, vine, etc., and indicate the distance apart for each variety. The instructions are complete. The cost is very moderate. Profile sheets will be sent you free of charge on which you can draw the sketch shown on preceding page and questions to be answered essential to our getting the right data. We print the questions to be answered on the following page. Ask for a Profile Sheet and complete instructions will be sent you by return mail.



BLUEPRINT MADE BY OUR LANDSCAPE DEPARTMENT FROM THE SKETCH  
SENT US SHOWN ON PRECEDING PAGE

## THE MAKING OF HOUSES INTO REAL HOMES (Continued)

### Important Information

The necessary data to be sent in with a sketch is found by us in your answers to the following questions. These are on the Profile Sheet we send you if you write for information:

Owner's name.....Business.....  
 City.....State.....  
 Street and number.....Rural route.....  
 Street paved?.....How?.....  
 Public or private property?.....Water service?.....  
 City or country?.....Spring or fall planting?.....  
 Kind of soil.....Subsoil.....  
 House constructed of.....Cost about.....  
 Style of architecture.....Color of home.....  
 Elaborate or modern job wanted?.....Estimate cost of planting job.....  
 State style of planting wanted, whether formal or informal.....

Locate all buildings, showing distance from each other and from all property lines.

Locate all entrances, showing number of steps.

Locate coal and laundry windows, also cellar doorways.

Locate walks, stating width and how constructed.

Locate drives, stating width and how constructed.

Locate existing trees and shrubs, naming kinds if possible.

Locate existing fences and hedges.

Locate any terraces or slopes.

Indicate objectionable outlooks.

Give dimensions of property.

Indicate views to be retained.

Give dimensions of buildings.

Indicate points of compass.

Give us some suggestions.

Make a sketch of property on this Profile Sheet, using a scale of 10, 20 or 40 feet to the inch. The larger the sketch the better. On large properties, especially parks and cemeteries, we will send an engineer to take measurements and make topographical surveys, if required, charging merely for the time and expenses involved. Send photographs if possible.

## SALESMEN WANTED

We need good salesmen.. We want men who have no apologies to make, no alibis to prove, and to such we can give permanent positions.

But—they must believe in the Biblical injunction of "Six days shalt thou labor," because it is the worker who "brings home the bacon."

Perhaps we have a place for you right now if you can give the work your attention!



WATER GARDEN

### Special Message to Landscape Architects

Because of the immensity of our business in the Landscape Department we are growing a special line of ornamentals for a select landscape trade, and our stock comprises many rare novelties not found in a general nursery. Our clients will not receive small, puny, mail size specimens of shrubs such as are sent out by some nurseries, nor will they receive old, overgrown, decrepit specimens that are ready for the brush pile.

The wonderful results obtained in our work are due to the high grade of the stock which we ourselves grow. Our stock is acclimated to the most severe conditions; and stock of this grade will assure permanent and lasting results. Our location, climate and facilities for handling this class of work is unsurpassed and we ask you to visit us, see the stock as we grow it and decide for yourself.

GRINNELL BROS.  
Michigan's Leading Music House  
Detroit, Mich.

July 24, 1920.

Greening Nursery Co.,

Monroe, Mich.

Attention Mr. Shepherd.

Gentlemen:

I wish you to know that the landscape work you did for me two years ago is very satisfactory. Your selection and artistic arrangement of shrubs and flowers gives a continuous bloom from early spring until late fall. The trees, shrubs and flowers have made a wonderful growth and are in excellent condition. I appreciate the splendid service you have given me and am very grateful to you.

Yours sincerely,

A. A. GRINNELL.





AN EVERGREEN PLANTING

## EVERGREENS AND CONIFERS

The landscape gardener is no longer content to use evergreens in quantity merely for specimen trees, shelter-belts, screens and hedges, but as new beauties are being continually discovered in them, new uses develop also. They form perfect backgrounds for the flowering plants and shrubs of early spring, for the berries of autumn and as a tracery for the bright barks and twigs of winter. Beautiful beds of permanent color can be formed by growing together sorts of moderate growth, with contrasting foliage of which there are the golden, the silver-hues, and the many shades and tints of green. Few trees or plants give so much cheer and add so much attractiveness to the winter landscape as do the pines, the spruces, the arbor vitae and the many other varieties of evergreens.

Many varieties, such as arbor vitae, respond readily to severe pruning—in fact, they may be trimmed into almost any desired shape or form. For this reason they are often used in trimmed hedges and for fanciful figures in the formal garden.

Greening's Evergreens are all carefully grown, at good distances for symmetrical development, and are root and top-pruned into handsome, shapely specimens that will transplant successfully to new homes with only ordinary care. Contrary to a rather prevalent belief, most evergreens are easily transplanted. We pack them so that the root fibres are well protected and will reach their destination in good growing condition. If planters will continue this care to keep the roots from drying out from exposure to the air and sun until the stock is planted, its successful growth is reasonably assured.

In planting evergreens, dig a large enough hole to take in all the roots and the soil which was shipped with the roots. After planting, soak the ground around the tree thoroughly with water and apply a covering of good straw manure to retain the moisture around the tree. Shade the tree with paper or burlap for the first two or three weeks so that the hot sun may not strike the tree directly until it has had a chance to start growing.

Let it be understood that evergreens come in a great variety of sizes and shapes. There are tall slim specimens as well as short stocky trees. No two trees, of course, can be exact counterparts, although it is always easy to select two trees which compare well with one another and which might be called a pair.

The price of evergreen trees is graduated according to height and spread. Customers intending to purchase evergreens in considerable numbers will please us by coming right to the nurseries and selecting the trees. The trees may be tagged right in the block where they grow and will be dug and shipped without the tags being removed.

We will ship no evergreens without a BALL OF EARTH.



## EVERGREENS AND CONIFERS (Continued)

### ABIES—Fir

**A. balsamea** (Balsam Fir)—A very erect, regular, pyramidal tree, with dark green sombre foliage. Grows rapidly and is very hardy.

**A. concolor** (Silver Fir of Colorado)—Without doubt the finest of the Rocky Mountain evergreens. Tree of graceful habit; broad, handsome foliage, bluish above, silvery beneath. A grand tree.

### BIOTA—Chinese Arbor Vitae

**B. orientalis** (Chinese Arbor Vitae)—Bushy and upright in growth and very attractive; foliage arranged in flat, vertical leaves.

### JUNIPERUS—Juniper

**J. chinensis** (Chinese Juniper)—A handsome, dense shrub with dark green foliage and somewhat drooping branches.

**J. chinensis aurea** (Golden Chinese Juniper)—One of the finest evergreens. Of spreading habit and with beautiful gold-marked foliage.

**J. chinensis foemina**—Very decorative, upright, pyramidal bush, with rather spreading branches; more slender than the type.

**J. chinensis mascula**—Tall, upright pyramidal, deep green, good for formal plantings, house corners, windbreaks and Japanese plantings.

**J. chinensis neaboriensis**—Foliage closely set and rigid, making the bush quite prickly. The rich, glaucous color is fine in summer; pyramidal; dense habit.

**J. chinensis pendula**—Forms a handsome, dense, spreading, pendulous shrub, with dark green foliage.

**J. chinensis pfitzeriana**—A very hardy, valuable, spreading variety, with silvery green color. Both the main stems and lateral shoots have a light, feathery appearance. The leaves have two prominent white lines on the under side.

**J. chinensis procumbens**—A trailing form of *Chinensis*, particularly well adapted for covering banks and for bordering.

**J. chinensis recurva**—Shrub or small evergreen tree with spreading and recurving branches. Fine foliage.

**J. communis** (English Juniper)—Low-growing bush, sometimes of prostrate habit; light glaucous foliage arranged at right angles to branch separately.

**J. communis var. aurea** (Douglas' Golden Juniper)—Of spreading growth, with bright golden foliage throughout



**THUYA OCCIDENTALIS**

the year; a distinct and charming variety.

**J. var. hibernica** (Irish Juniper)—A distinct and beautiful variety, of erect, dense, conical outline, resembling a pillar of green; very desirable.

**J. var. suecica** (Swedish Juniper)—A small-sized, handsome, pyramidal tree, with yellowish-green foliage. It is quite hardy.

**J. var. glauca** (Glaucous Cedar)—The compact, conical habit of this variety, combined with its silvery-bluish foliage, render it very distinct and desirable.

**J. excelsa stricta**—A very symmetrical, conical outline. Foliage glaucous and arranged around the branch in threes, dense and prickly.

**J. japonica**—Very solid, green foliage; oblique, spreading habit; worth a good place on a slope.

## EVERGREENS AND CONIFERS (Continued)

**J. japonica aurea**—Small, splendid golden, scaly leaves closely adpressed to branchlets, giving a consistent color throughout the spreading bush, which is distinct and attractive.

**J. japonica spherica**—A tall upright pyramidal, green foliage. Good for wind-breaks, hedges, individual specimens, Japanese gardens and backgrounds.

**J. japonica variegata**—Foliage green, sprayed with yellow shoots.

**J. Sabina** (Savin Juniper)—A dwarf, spreading shrub, with trailing branches. Thrives in the poorest soils. Very suitable for rockwork.

**J. Sabina fastigiata**—Erect shrub, of columnar habit, with dark green leaves.

**J. Sabina prostrata**—Dull green leaves. Grows rapidly and makes a very pleasing effect when planted on terraces; also used for covering rocks and bare, sunny positions.

**J. Sabina tamariscifolia** (Gray - Carpet Juniper)—A distinct, trailing variety of Sabina. The needle-shaped leaves have a deceptive but pleasing shade of gray-green. Fine for edging.

**J. virginiana** (Red Cedar)—A well-known American tree; varies much in habit and color of foliage, some being quite stiff, regular and conical, and others loose and irregular. It makes a fine ornamental hedge plant.

**J. alba spica** (Variegated Red Cedar)—The same as the preceding, with branches of creamy white interspersed among the green.

**J. virginiana cannaertii**—A fine, pyramidal, compact grower of dark green appearance; some of the branches lengthen out and droop, thus presenting a novel and pretty picture.

**J. elegantissima** (Golden Cedar)—Forms a columnar tree, while the side branchlets curve over effectively. Beautiful golden brown foliage; effective in winter; very distinct.

**J. schottii**—A fine, hardy evergreen, of columnar habit; foliage light green and feathery.

**J. virginiana tripartita**—The rather prickly foliage is grayish; robust habit, forming a wide, irregular bush.

### LARIX—Larch

**L. europaea** (European Larch)—An elegant, rapid and pyramidal-growing tree, with light green foliage; drooping habit; valuable as a lawn tree.



**PICEA PUNGENS KOSTERIANA**  
(Koster's Blue Spruce)

**L. laricina** (American Larch)—Similar to the European but is of a light bluish green color. Hardy and valuable. Very handsome in spring.

### PICEA—Spruce

**P. canadensis var. alba** (White Spruce)—A native tree of medium size, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy and valuable.

**P. Douglasii** (Douglas' Spruce)—From Colorado. Large, conical form; branches spreading, horizontal; leaves light green above, glaucous below. A valuable evergreen tree.

**P. excelsa** (Norway Spruce)—From Europe. An elegant tree; extremely hardy, of lofty, rapid growth and pyramidal form. The branches assume a graceful, drooping habit when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses for effect or shelter. It is one of the best evergreen hedge plants.

## EVERGREENS AND CONIFERS (Continued)

## PICEA (Continued)

- P. excelsa aurea** (Golden Norway Spruce)—Similar in habit to *P. excelsa* but the foliage is of golden yellow.
- P. Engelmannii**—Very ornamental as specimen. Forms a dense and narrow pyramid when young.
- P. compacta** (Compact Norway Spruce)—One of the best of all evergreens. Foliage bright green, laying in upright layers, heavy and beautiful.
- P. nana compacta** (Dwarf Compact Norway Spruce)—A fine dwarf evergreen excellent for planting singly. Partakes of the nature of *Compacta* as described except not so tall growing and is not pyramidal.
- P. pungens glauca** (Colorado Blue Spruce)—One of the hardiest and most beautiful of all the spruces; in form and habit similar to the White Spruce; foliage of a rich blue or sage color.
- P. pungens** (Colorado Green Spruce)—Of pyramidal growth. Bluish-green in color, rarely dull green. A very handsome and hardy tree of symmetrical habit.
- P. pungens glauca Kosteriana** (Koster's Blue Spruce)—Similar to the Colorado Blue Spruce, except that the foliage is a much brighter blue. Very rare.
- P. pendula inverta** (Weeping Norway Spruce)—Grotesquely pendulous; attractive from its novelty and unique habit. Grows 40 to 60 feet high and has larger and light green foliage.
- P. remonti**—A dwarf form, slightly inclined to fastigate shape; compact and hardy.

## PINUS—Pine

- P. nigra Austriaca** (Austrian or Black Pine)—Tree remarkably robust, hardy and spreading; leaves long, stiff and dark green; growth rapid. The most valuable for this country.
- P. Cembra** (Swiss Stone Pine)—A handsome and distinct European species, of compact, conical form; foliage short and silvery. Grows slowly when young.
- P. montana** (Swiss Mountain Pine)—The dull green foliage is rather short but thick, arranged in pairs and seems to be crowded on the spreading branches. Very variable in habit, usually low, often prostrate. Ornamental when singly planted or covering rocky slopes.
- P. montana Mughus** (Dwarf Mugho Pine)—An upright, small pine. Its general form is that of a pine bush.
- P. resinosa** (Norway or Red Pine)—Very ornamental; quite hardy and of



PINUS AUSTRIACA

vigorous growth; the needles are lustrous green, long and most often in pairs, contrasted by the russet-colored stubby cones.

- P. Strobus** (White or Weymouth Pine)—The most ornamental of all our native pines; foliage light, delicate or silvery green. Flourishes in the poorest light sandy soil. Very valuable.
- P. sylvestris** (Scotch Pine or Fir)—A native of the British Islands. A fine, robust, rapid growing tree, with stout, erect shoots and silvery green foliage. Very hardy; valuable for shelter.
- P. sciadopitys verticillata** (Umbrella Pine)—A beautiful conifer of compact, conical form, with glossy dark green foliage; rather slow growth; thrives well in moderately moist, loamy, also in clayey soil; leaves needle-like and in whorls.
- RETINISPORA—Japan Cypress**
- R. filifera** (Thread-branched Japan Cypress)—A tree of very graceful appearance with bright green foliage, slender, string-like and drooping. Very beautiful and ornamental.
- R. var. aurea** (Golden Thread-branched Japan Cypress)—A form of *Filifera*. Bright golden color. The best golden conifer known to us.
- R. obtusa** (Obtuse-leaved Japan Cypress)—Dark fern-like foliage; distinct and beautiful; habit drooping and graceful.

## EVERGREENS AND CONIFERS (Continued)

*R. obtusa* var. *nana* (Dwarf Obtuse-leaved Japan Cypress)—A handsome evergreen shrub, dense, bushy growth; foliage extremely dark green and very pretty.

*R. pisifera* (Pea-fruited Japan Cypress)—An upright tree; foliage light green and feathery; the branches are somewhat pendulous at the ends.

*R. var. aurea* (Golden Pea-fruited Japan Cypress)—A fine pyramidal, bright golden form; popular and graceful.

*R. pisifera plumosa* (Plume-like Japan Cypress)—Useful for specimens or hedges; foliage light green and plume-like; extensively planted.

*R. pisifera plumosa* var. *aurea* (Golden Japan Cypress)—Golden form of *R. plumosa*.

*R. pisifera squarrosa* (Squarrose-leaved Japan Cypress)—Choice ornamental tree; Japan form, with steel-colored foliage, which is very fine and pretty.

*R. pisifera squarrosa* var. *sulphurea*—Round head, bushy, covered with numerous small leaves of a sulphur-yellow tint. Very dense growth, but has a soft, woolly appearance.

### TAXODIUM—Deciduous Cypress

*T. distichum*—A tall, pyramidal tree, hardy and very desirable for park planting. Foliage light green, feathery against cinnamon bark. Its habit of growth gives it a very distinct appearance. Prefers moisture.

### TAXUS—Yew

*T. baccata* (English Yew)—Dense growing, thick branched trees of medium height, foliage dark green, bright scarlet berries. Stands shearing.

*T. baccata* var. *repandens*—Spreading habit; hardy and distinct.

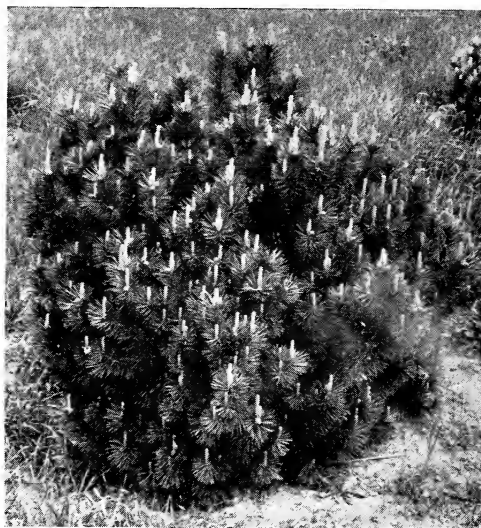
*T. cuspidata* (Japanese Yew)—Dense growing. One of the hardiest; habit spreading; foliage deep green.

*T. cuspidata* var. *brevifolia*—A form of the above with short, dark green leaves. A very handsome, hardy variety. Rare.

*T. cuspidata* var. *nana*—Shrubby form with spreading branches densely clothed with short branchlets. Compact.

### TSUGA—Hemlock

*Tsuga canadensis* (Hemlock)—A broadly pyramidal, medium-sized tree of dense growth, with rich green foliage. Branches thickly set, with more or less pendulous tendency, giving a particu-



PINUS MUGUS

larly graceful effect to the whole. Choice as a single lawn tree or for hedge purposes, succeeding in all except particularly bleak situations.

### THUJA (THUYA)

See Biota—Arbor Vitae

*T. occidentalis* (American Arbor Vitae)—A beautiful native tree commonly known as the White Cedar; especially valuable for screens and hedges.

*T. occidentalis* var. *compacta*—Desirable for planting in tubs. Very compact in growth. Pyramidal and grows in perfect form without pruning. From 3 to 4 feet high. Leaves of light grayish green.

*T. occidentalis elegantissima* (Rollinson's Golden Arbor Vitae)—Distinct from other Eastern sorts. The upright, flat branches are held edgewise to the center of the tree. Their tips are bright yellow in summer, brown in winter. Very handsome. Half hardy.

*T. occidentalis Ellwangeriana* (Tom Thumb Arbor Vitae)—A heath-leaved dwarf variety. Grows in ball form and is well adapted to pruning in globular form. Beautiful for bordering driveways, walks and formal garden work.

*T. occidentalis globosa* (Globe Arbor Vitae)—A dense, light green evergreen of dwarf habit, grows naturally round like a ball. One of the best of the dwarf.

## EVERGREENS AND CONIFERS (Continued)

### THUJA (Continued)

- T. occidentalis aurea Hoveyi** (Hovey's Golden Arbor Vitae)—Is a distinct, compact, hardy American seedling; dense and conical with light, golden green foliage.
- T. occidentalis aurea** (Geo. Peabody, Golden Arbor Vitae)—Same habit as *Occidentalis* except for the color, which is a beautiful bright golden yellow. Fine for specimen planting.
- T. occidentalis pyramidalis** (Pyramidal Arbor Vitae)—A tall, slender column of dark green resembling Irish Juniper in growth, retains its color in the winter. Very hardy, will stand severe shearing.
- T. occidentalis Siberica** (Siberian Arbor Vitae)—This is one of the most useful and hardy evergreens for the northern states. Its excessive hardness, regular conical outline and peculiar dark, dense foliage makes it very popular for hedges or screens and is especially beautiful and more attractive than the other species.
- T. occidentalis Wareana**—Dwarf habit and globular form. Foliage silvery tinged. Like *Globosa* in growth and adapted for grouping.
- T. occidentalis Wareana var. aurea**—Same habit as above except the color



COLORADO BLUE SPRUCE

of foliage which is a good golden yellow.

Note.—For Chinese Arbor Vitae refer to *Biota*.

## EVERGREEN SHRUBS

### BUXUS—Box

- B. sempervirens arborescens** (Tree Box)—A beautiful evergreen shrub of rather slow growth, with small, shining foliage. Familiar in old-fashioned gardens, indispensable in formal ones. It grows well in many soils and endures much pruning. Quite popular as a tub plant, for house and terrace decoration.
- B. sempervirens suffruticosa nana**—The pretty dwarf box so much used for

edging. Slow growing, neat, dense; the best plant in cultivation for the purpose.

### EUONYMUS

- E. radicans variegata**—A charming shrub of dwarf and training habit; it is perfectly hardy and has foliage beautifully variegated with silvery white, tinted with red in the winter. Unsurpassed for borders.



I received my trees that I bought from you in good condition and they were fine stock. Would like to order early this summer for next spring.—D. W. Wenger, Orrville, Ohio.

Every tree is growing well. We are perfectly satisfied.—Mrs. Ralph Cowles, St. Johns, Mich.

I received the stock O. K. and in good condition. Everything is growing satisfactorily.—Edmund Austin, Quincy, Mich.

I have the finest peach orchard in the State of Ohio. Just wish you could see them. Trees all bought from you.—F. E. Birch, E. Orwell, Ohio.



#### EVERGREEN VISTA AT OUR NURSERY

Showing Perfection of Our System of Growing and Training—We Have a Large Stock to Select From at All Times

### EVERGREEN SHRUBS (Continued)

#### KALMIA—Laurel

*K. latifolia* (Mountain Laurel)—Evergreen shrub, with dense, round-topped head; leaves broad, glossy, dark green above and yellowish green below. The flowers, beautiful pink and white, are borne in large terminal compound corymbs. In their prime about the middle of June.

#### RHODODENDRON

These are the most magnificent of the evergreen shrubs, with rich, green foliage and superb clusters of showy flowers. They require a peaty soil, free from

lime, and a somewhat shaded situation; they do best near the seashore and will repay all the care that may be bestowed in preparing a bed suited to their wants. Protect in winter by driving stakes and filling in with leaves to cover plant. Can furnish in colors of red, pink, white, lavender and blue.

*R. in variety*—Colors red, pink, white, lavender and blue. Order by color.

*R. catawbiense* (Catawba Rhododendron)—A native sort. Parent of the hardy hybrids. Late spring bloom of rose-lavender.



YOUNG EVERGREENS AT OUR NURSERY



"ONLY GOD CAN MAKE A TREE"

## DECIDUOUS TREES

Trees and shrubs are the natural framework—and the lawn the setting of every landscape picture. With trees and shrubs we emphasize certain natural features of the earth's contour, screen an unsightly view, and give the skyline a most interesting outline, and it is possible by careful and judicious planting to give even a small piece of property an extensive appearance. Trees not only add to the beauty of the surroundings, but also offer their cooling and refreshing shade during the hot summer months and we all know that under their delightful branches some of the happiest days of life are spent.

The planting of the right varieties for a harmonious combination and for adaptability and hardiness requires considerable knowledge of tree life. A great deal of money is wasted each year just through ignorance of what is required in the way of soil, drainage and protection for a tree in its new location. The planting of trees is a more serious problem than it at first appears. A big mistake often made by the inexperienced landscape gardener is to plant too closely, but it is not to be wondered at when you stop to think what a complete knowledge of tree growth is necessary to the proper handling of them. Then if the trees survive, after fifteen or twenty years they have become so crowded that they lose all semblance of their natural beauty.

Consult this book for the growing habits of the various deciduous trees. Plant them with due regard for their need of space. Directions for tree planting given elsewhere in this book.

Visitors at our nurseries have been impressed by the magnificence of the beautiful double row of Silver Maples which lines the boulevard which leads from the La Plaisance Road along the frontage of our nursery grounds.

In the summertime these trees develop into such a wonderful luxuriance of foliage that they form a perfect roof or arch over the entire roadway. To drive or walk down through its leafy length is like passing through a vast green cool tunnel.



## DECIDUOUS TREES (Continued)

The temperature is several degrees cooler because of the dense overhead shade. An ordinary shower seldom penetrates through to the road and the driveway is therefore perfect at all seasons.

This private roadway or boulevard is the pride of the country around. Although it is private, it is still the most used piece of road in Monroe County. Visitors are welcome to drive their autos or carriages there and the privilege is much taken advantage of.

The Silver Maples were planted along the boulevard by Chas. E. Greening thirty some years ago. In these intervening years they have been gathering size and splendor with each passing season. Their development is an everlasting monument to the perfect qualities of Silver Maples as shade and ornamental trees for street and boulevard planting. Their life is only just begun.

If you visit the nursery you will be driven out through this great row of monarchs.

### ACER—Maple

Trees of this group are hardy, vigorous, adaptable to many soils, free from diseases, easily transplanted, regular in outline and beautiful in leaf. Nearly all are brilliantly colored in fall, especially the North American species.

**A. dasycarpum** (Silver Maple)—Of quicker growth than most trees and valuable where immediate shade is required. Forms a large spreading head; the fine leaves are silvery beneath. Grows over 100 feet high.

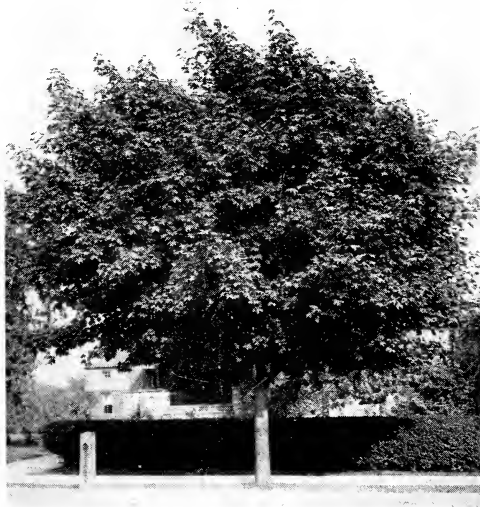
**A. dasycarpum var. pyramidalis** (Silver Maple)—Perfect pyramidal shape; the best of all pyramidal-growing trees. Very fine for screening. Branches from bottom.

**A. dasycarpum var. Wieri laciniatum** (Wier's Cut-leaved Silver Maple)—A very beautiful specimen tree, with delicately cut leaves and distinct, half-drooping habit. The leader grows rapidly upright, the slender lateral branches curve gracefully downward. Of noble proportions when undisturbed, yet patient under considerable pruning.

**A. negundo** (Ash-leaved Maple; Box Elder)—This species is easily distinguished by its pinnate leaves and greenish yellow bark. It grows rapidly into a large spreading tree, 70 feet high. Found valuable for planting timber claims, shelter-belts, etc., in the West, where it endures both drought and cold.

**A. pennsylvanicum** (Striped Maple)—A handsome medium-sized tree of upright, dense habit, with bright green, large foliage, turning clear yellow in autumn. Attractive even in winter for its smooth greenish bark striped with white.

**A. platanoides** (Norway Maple)—A handsome tree, of large, fairly rapid growth, 80 to 100 feet, forming a dense, rounded head of strong branches and broad, deep green leaves. Sturdy, compact, vigorous, it is one of the very best trees for lawns, parks and gardens.



NORWAY MAPLE

**A. platanoides var. globosum**—Fine, ball-shaped variety; standard form; excellent for lawn and formal effects.

**A. platanoides var. Reitenbachii** (Reitenbach's Norway Maple)—A magnificent variety. Foliage beautiful green in early spring, changing to purple toward midsummer. Retains its color all season.

**A. platanoides var. Schwedleri**—The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees. In midsummer they are purplish green, in autumn golden yellow.



## DECIDUOUS TREES (Continued)

**A. pseudo platanus** (European Sycamore Maple)—A broad, handsome tree of medium size, rarely over 60 feet high, with larger, darker leaves than other maples. Casts dense, cool shade.

**A. pseudo platanus var. Leopoldii** (Leopold's Sycamore Maple)—A variation of the above on which the leaves are a bright rosy pink while young.

**A. pseudo platanus var. Spaethi** (Spaeth's Sycamore Maple)—Another variety of this beautiful tree in which the leaves when unfolding are purplish beneath and a bright red above when unfolded.

**A. rubrum** (Red, or Scarlet Maple)—Excellent habit, scarlet flowers in early spring; dense foliage, gorgeous color in autumn.

**A. saccharum** (Sugar or Rock Maple)—This tree is chieftain of its kind, straight, spreading, symmetrical, of grand proportions, often 120 feet in height and longer lived than most men who plant it. It grows well in all except damp, soggy soils, and roots deeply, allowing the grass to grow close about its trunk. Its leaves have very rich autumn tints of clear yellow and scarlet.

**A. spicatum** (Mountain Maple)—Shrub, or small tree, valuable as undergrowth; leaves rough and broad, turning yellow and scarlet in autumn.

**A. tataricum** (Tartarian Maple)—Hardy, low-branched tree of shrubby growth; bark light color and smooth. Grows best in somewhat moist soil.

**A. tataricum var. Ginnala** (Tartarian Maple)—Graceful shrub, with handsome foliage, turning bright red in autumn; may be used as substitute for Japanese Maples where they are not hardy.

## JAPANESE MAPLES

**A. palmatum** (Japanese Maple)—Handsome shrub of dense though graceful habit; elegant foliage, especially in spring and fall when leaves assume most striking tints.

**A. palmatum var. atropurpureum** (Blood-leaved Japanese Maple)—Hardy. Leaves blood-red in spring, changing to dark purple; pretty throughout the season.

**A. palmatum var. atropurpureum dissectum** (Weeping Blood-leaved Japanese Maple)—Delicately cut leaves, deep blood-red; drooping branches.

**A. palmatum var. aureum** (Golden Japanese Maple)—Small and hardy; leaves golden yellow.

**A. palmatum var. dissectum** (Cut-leaved Japanese Maple)—Weeping form, foliage light green and finely cut; hardy.

**A. palmatum var. roseum marginatum**—Small leaves, green in center with edges tinted with pink. Noted for extreme hardiness. A fine and novel tree.

## AESCULUS—Horse-Chestnut

**A. hippocastanum** (European White-Flowering Horse-Chestnut)—A large tree, 40 to 60 feet tall, of regular outline, spangled in May with great upright spikes of white and red flowers. Has no superior as a specimen flowering tree.

**A. carnea** (Red-Flowering Horse-Chestnut)—A somewhat smaller tree, rarely over 30 feet, with darker leaves and splendid flower-spikes opening a little later. Fine for contrasting with the white-flowered.

## AILANTHUS

## Celestial Tree, Tree of Heaven

**A. glandulosa**—An extremely quick-growing tree; 60 feet tall and tropical looking with pinnate, palm-like leaves. Valuable because it thrives in smoky cities and in soils where other trees perish.

## ALNUS—Alder

**A. glutinosa** (European or Common Alder)—Foliage roundish, wedge-shaped, wavy. Remarkably quick in growth; 30 to 60 feet high.

**A. glutinosa laciniata imperialis** (Imperial Cut-leaved Alder)—Of stately, graceful habit, 30 to 60 feet high, with large and deep-cut foliage. Vigorous and perfectly hardy. A grand lawn tree.

## AMYGDALUS—Almond

**A. communis flore pleno rosea** (Large Double-Flowered Almond)—A vigorous, beautiful tree, covered in May with double rose-colored blossoms, like small roses.

**A. Davidiana alba** (Flowering Almond)—Flowers single white and appear before the leaves; very showy. The first tree to flower in the spring and hence particularly desirable on that account.

**A. Davidiana rubra**—A variety with single rose-colored flowers.

For dwarf varieties, see *Prunus*, in "Ornamental Shrubs."



CATALPA BUNGEI

## DECIDUOUS TREES (Continued)

### ARALIA—Angelica Tree

- A. spinosa** (Hercules' Club)—A showy native, with broad, handsomely cut leaves and huge clusters of small white flowers in July. Its winter effect is unique and handsome. Grows to 30 or 40 feet high.

### BETULA—Birch

- B. alba** (European White Birch)—This is the famous birch of literature, growing sometimes 80 feet high. Quite erect when young, its branches begin to droop gracefully with age. Its bark is snow-white and very effective in landscape views, especially if grown in front of a background of dark evergreens.
- B. alba var. purpurea** (Purple-Leaved Birch)—Foliage deep purple; white bark, vigorous habit.
- B. alba var. laciniata pendula** (Weeping Cut-Leaved White Birch)—One of the most popular of the weeping trees. Foliage deeply cut, drooping in the most picturesque manner; silvery white bark; vigorous growth.
- B. alba pendula Youngii** (Young's Weeping Birch)—Umbrella form; its leaves, as well as branches, bend toward the ground.
- B. lutea** (Yellow Birch)—Bark is silvery gray or light orange; leaves hairy

along the veins beneath; one of the most valuable forest trees in the Northern States. A blaze of gold in autumn.

- B. papyrifera** (Canoe, or Paper Birch)—Ornamental tree, with very white trunk and loose, graceful head when older; leaves large and handsome.

### CATALPA

- C. Bungei** (Chinese Catalpa)—A curious dwarf catalpa. It is very useful in formal work when grafted on stems of the *Catalpa Speciosa*, forming a pretty, dome-shaped head 10 to 12 feet high, of great, soft, heavy leaves. The flowers are borne in large clusters a foot long; the leaves are laid with shingle-like precision. Hardy, strong-growing, unique.
- C. Bungei** (Dwarf Bungei)—A dwarf form brought about by working low, making a handsome dwarf specimen.
- C. speciosa** (Western Catalpa)—A fine, hardy sort, well adapted for forest and ornamental planting. The coarse-grained soft wood is very durable and useful for railroad ties, fence-posts, etc. Blooms earlier than the others and grows to be a large tree 100 feet high. In late summer its great crop of long, narrow "beans" is very effective.



Note the young Koster's Blue Spruce in foreground—that the banking is Deutzia and Spirea in full bloom.

## DECIDUOUS TREES (Continued)

### CELTIS—Hackberry, Nettle Tree

**C. occidentalis**—A rare native tree that deserves much more general planting. It grows 100 to 120 feet high and its light green leaves are glossy, pointed, almost entirely free from insects; the branches spread horizontally, forming a wide, elm-shaped head of medium size. Vigorous, hardy and healthy, thriving in all soils.

**C. occidentalis var. pumila**—A dwarf form, rarely over 30 feet tall and with smaller leaves. Sometimes more desirable by reason of its height.

### CERASUS—Cherry

A very ornamental family of trees. The drooping varieties are especially adapted to beautify small grounds. As single specimens on the lawn they are unique and handsome and require only to be better known in order to be extensively planted.

**C. avium var. flore plena alba (prunus)** (Large Double-Flowered Cherry)—At the period of flowering in May, a remarkably beautiful and attractive tree. The flowers are white and so numerous as to conceal the branches and present to the eye nothing but a mass of bloom, each flower resembling a miniature rose. A valuable variety.

**C. padus (prunus)** (European Bird Cherry)—One of the earliest of all trees to leaf out in the spring. Makes a shapely tree of 10 to 20 feet. Beautiful when in bloom in May.

**C. serotina** (Wild Black Cherry)—Strong straight tree, oftentimes reach-

ing the height of 100 feet. Flowers when leaves are full grown. Fruit size of pea, purplish black when ripe in late summer. Valuable for a lawn tree.

**C. Sieboldii flore plena (prunus)** (Siebold's Double-Flowered Cherry)—Semi-double flowers, white, tinged with red.

**C. var. Sieboldii flore plena rubrum (prunus)** (Siebold's Red-Flowering Cherry).

**C. James H. Veitch**—A Japanese cherry, producing deep rose-pink double flowers in early spring in great profusion. One of the most beautiful.

**C. virginiana** (Choke Cherry)—Tall shrub with rough speckled bark. Blooms with coming out of the leaves. Fruit red or amber colored, the size of a pea in summer. Valuable in landscape work.

### CERCIS—Red Bud, Judas Tree

**C. canadensis**—The hardiest and perhaps the finest species of a handsome group of early and profuse-flowering trees. Medium height, 20 to 30 feet, forming a broad, irregular head of glossy, heart-shaped leaves that color pure yellow in fall. It blooms in earliest spring, with the dogwoods and magnolias, and is valuable for grouping with them. Its masses of small, delicate rosy purple flowers wreath the leafless branches so thickly as to give very fine contrasts and cheery spring effects. Must be transplanted when small.





This picture nicely illustrates what changes can be made in beautifying a factory building. Not a dull, dingy wall and naked grounds, but a place surrounded with life and beauty, a place where the workmen feel contented and the employer has a pride in his surroundings. It is a moral and mental uplift to all concerned. The neatness of surroundings as exemplified by factory owners has much to do with the contentment and service of the employed.

## DECIDUOUS TREES (Continued)

### CHIONANTHUS—Fringe Tree

**C. virginica** (White Fringe)—A small native tree or shrub, of roundish form, with large, glossy leaves and drooping racemes of pure white flowers having narrow, fringe-like petals; blossoms in May or June. A superb lawn tree.

### CORNUS—Dogwood

**C. florida** (White-Flowering Dogwood)—The great white flowers are 3 inches and more in width, lasting in favorable weather for as many weeks. Besides the fine characteristics given above, the bright red bark on its young growths makes it attractive and cheery in winter. Tree rarely grows over 20 feet in height and is branching in habit. Blooms when small.

**C. florida var. flore rubro** (Red-Flowered Dogwood)—A variety producing flowers suffused with bright red; blooms when quite young. One of the finest flowering trees.

### CRATAEGUS—Flowering Thorn

A low, dense, neat habit of the thorns adapts them for planting in small yards and for grouping anywhere. Are very hardy and grow well in all dry soils. The foliage is varied, always attractive, handsome and almost evergreen in some cases; the flowers are showy and abundant, often quite fragrant; the fruits are retained long in some species, are so thick as to burden the branches and fre-

quently of bright color. Their foliage colors brilliantly in fall.

**C. coccinea flore pleno** (Scarlet Hawthorn)—Large leaves. Showy with large scarlet fruit. Good for screens. Very attractive.

**C. Crus-galli** (Cockspur Thorn)—A dwarf tree, rarely over 20 feet high, with widely extending horizontal branches, giving it a flat-topped effect. The leaves are thick, glossy, coloring to rich orange and scarlet in fall; flowers profuse white with tinge of red, opening in May; fruits showy scarlet, persistent until spring.

**C. monogyna alba flore pleno**, otherwise called *Oxyacantha Alba Flore Pleno* Common Hawthorn)—The celebrated English hedge plant; flowers pure white, sweet-scented, followed by scarlet fruit.

**C. monogyna rosea flore pleno** (Double Pink Hawthorn)—Practically the same description as *Alba* except of course pink-flowering.

**C. Paulii** (Paul's Double Scarlet Thorn)—A tree of fine habit, with rich, luxuriant foliage; flowers much larger than the double red, of a deep crimson color, with scarlet shade and very double.

**C. var. punicea** (Single Scarlet Thorn)—Of moderate growth and fine habit; flowers single scarlet and highly perfumed. One of the best.

## DECIDUOUS TREES (Continued)

### CYTISUS—Golden Chain

**C. laburnum vulgare** (Common Laburnum or Golden Chain)—A native of Europe, with smooth and shining foliage. The name "Golden Chain" alludes to the length of the drooping racemes of yellow flowers, which appear in June.

**C. liburnum alpinum** (Alpine or Scotch Laburnum)—A native of the Alps of Jura. Also said to be found wild in Scotland. Of irregular, picturesque shape, smooth, shining foliage, which is larger than the English, and yellow flowers in long racemes. Blooms later than the English.

### FAGUS—Beech

The Beeches are noted for their rich, glossy foliage and elegant habit. The Purple-leaved, Cut-leaved, and Weeping Beeches are three remarkable trees, beautiful even while very young, but magnificent when they acquire age. As single specimens upon the lawn, they exhibit an array of valuable and attractive features not to be found in other trees.

**F. americana** (American Beech)—One of the finest American trees.

**F. sylvatica** (European Beech) — A beautiful tree attaining a height of 60 to 80 feet.

**F. var. pendula** (Weeping Beech) — A remarkably vigorous, picturesque tree of large size and of wonderful grace and beauty.

**F. var. purpurea Riversi** (Rivers' Smooth-Leaved Purple Beech)—Compact, symmetrical habit of growth and crimson foliage early in spring changing to a dark purple in summer. The finest of all purple-leaved trees.

### FRAXINUS—Ash

**F. americana** (American White Ash)—A well-known native tree.

**F. var. pendula** (Weeping Ash) — The common, well-known sort; one of the finest lawn and arbor trees. Covers a great space and grows rapidly.

### GLEDITSIA—Locust

**G. triacanthos** (Honey Locust) — Good for park or street planting and makes impenetrable hedges if planted thickly and pruned severely. Bears small pink flowers in May in racemes followed by pods often 18 inches long.

### GYMNOCLADUS

**G. dioica** (Kentucky Coffee Tree) — A picturesquely irregular tree 30 to 60 feet high, with peculiar rough-barked twigless branches and broad fronds of twice-pinnate foliage of a peculiar bluish green. Bears long racemes of white flowers in early summer. The



LOMBARDY POPLAR

familiar name is from the seeds in its broad beans, which were once used for coffee in the southern mountains. Yellow in fall.

### HALESIA

#### Snowdrop, or Silver Bell Tree

**H. tetraptera**—A neat and pretty little tree, rarely over 12 feet high, with large, dark green leaves. May be grown as a shrub. In May, while the leaves are yet small, its branches are hung thickly with small white or pinkish drooping bells about one inch long. These are followed by large and curious winged seeds which impart to it a peculiar ornamental effect.

## DECIDUOUS TREES (Continued)

### JUGLANS—Walnut

*Juglans cinerea* (Butternut)—A strong native tree; open-headed and spreading, with grayish rough bark; valuable for its nuts, as well as an ornamental tree; foliage resembles aïlanthus.

*J. nigra* (Black Walnut)—Native tree of great size and majestic habit; bark is of dark brown color; foliage beautiful; valuable.

*J. regia* (English Walnut)—A native of Persia; a light sandy soil or well-drained hillside is to be preferred for the growth of this tree; grows very large and lofty in its native country; nut oval and very fine.

*J. Sieboldiana* (Siebold's Japan)—A most valuable species, which on account of its hardiness and vigorous growth is well adapted for our country. It grows with great vigor, assuming one of the most shapely trees for ornament and shade, without any particular pruning or care. One of the hardiest of nut trees. Tree begins to bear when two or three years old. Its nuts are considerably larger than the common hickory nut and borne in larger clusters of 15 to 20. The shell is a little thicker than that of the English walnut, which it resembles in a general way; the kernels are meaty, delicate, and can be removed entire; considering its early bearing hardiness and quality, it is regarded the most valuable of any nut for our country.

### KOELREUTERIA

*K. paniculata* (Varnish Tree)—From China. Desirable lawn tree; has large pinnate leaves; in July produces a mass of showy orange-yellow flowers, followed by curious seed-vessels.

### LARIX—Larch

*L. europaea* (European Larch)—A tall and handsome deciduous conifer, which grows to 100 feet in height, with tapering trunk and pyramidal head. Particularly beautiful in early spring when covered with soft and feathery foliage of a delicate green. Its plummy foliage and drooping twigs give it a very graceful effect while its trim, straight figure is most imposing and majestic and becomes the feature of any landscape. A grand, hardy, lawn tree that thrives well in all but soggy soil. The autumn effect is very beautiful; foliage turning to a beautiful yellow, giving the tree the appearance of being a fountain of gold.



WEIR'S CUT-LEAVED MAPLE

*L. laricina* (American Larch)—Similar to the European but is of a light, bluish green color. Hardy and valuable. Very handsome in spring.

### LIQUIDAMBAR

*L. styraciflua* (Sweet Gum)—A tree that is beautiful at all stages and useful in all sorts of planting. Varying from 60 to 80 feet in height, it has a narrow, ovate head, formed of short corky-winged branches and masses of star-shaped, lustrous leaves that color to intense crimson scarlet in fall. Even in winter its odd, swinging sea balls and corked-winged branches make it picturesque and interesting. The name is from its fragrant sap and leaves. We have no finer tree for street and park planting or for specimens.

### LIRIODENDRON

*L. tulipifera* (Tulip Tree)—A tall, magnificent native of rapid pyramidal growth to 100 feet. Its smooth, erect gray trunk rises to a great height and is clothed with a splendid vesture of large, glossy leaves, spangled in spring with large tulip-shaped flowers of greenish yellow and orange. One of our most distinguished tall trees, for broad avenues, parks and lawns.

The nursery stock came in fine condition and was extra good.  
—S. B. Perkins, Paris, Ill.

## DECIDUOUS TREES (Continued)

## MAGNOLIA

The spring inflorescence of the Magnolias is grand beyond description. Their great white, pink and purple cups open in rich profusion before the leaves of other trees appear. The fruits which follow them are large, bright-colored and showy; the leaves are tropical in size and appearance; the trees are naturally of fine habit and bloom when quite small. They should be transplanted only in spring.

## NATIVE SORTS

These are among the most beautiful trees. Please note the native sorts attain a height of 50 to 60 feet as far north as Ohio.

**M. acuminata** (Cucumber Tree)—A tree of large pyramidal growth. The fruit resembles a small cucumber when young, but when ripe is of a deep scarlet. The leaves are large, deep green. Flowers yellow, tinged with bluish purple.

**M. glauca** (Sweet Bay)—Irregular in habit; foliage thick, glossy, deep green. It blossoms in June; flowers white and sweet-scented.

**M. tripetala** (Umbrella Tree)—A hardy, vigorous, medium-sized tree. Produces white flowers in June. Immense leaves.

## CHINESE SPECIES AND THEIR HYBRIDS

The Chinese sorts and their Hybrids are small, dwarf trees of shrubby nature. These are excellent for garden or lawn.

**M. Lennei** (Lenne's Magnolia)—A fine variety; strong grower. Produces dark purple cup-shaped flowers in April.

**M. Soulangeana** (Soulange's Magnolia)—Small tree or large shrub. One of the hardiest and most popular of the foreign Magnolias. Blossoms in April; flowers white inside, outside petals pink. Foliage dense and glossy. Superb.

**MALUS**—Fragrant Flowering Crab  
(See under Pyrus)

## MORUS—Mulberry

**M. alba** (White Mulberry)—The silkworm Mulberry. Tree is usually thick-topped and bushy grower. Foliage light green; fruit white, or sometimes violet-colored.

**M. alba tatarica** (The Russian Mulberry)—A very hardy variety with reddish fruit.

**M. alba pendula** (Tea's Weeping Mulberry)—One of the best of small weep-



TEA'S WEEPING MULBERRY

ing lawn trees, forming a perfect umbrella-shaped head. Foliage light green, deeply lobed. Fruit reddish purple. Thrifty and hardy.

**M. Downings** (Downings)—Large edible fruit.

**M. New American**—Rapid grower; hardy. Fruit large and of prime quality.

## OSTRYA—Ironwood

**O. virginica** (Hop Hornbeam)—A graceful, birchlike tree of small to medium size, rarely over 30 feet, and slow growth. The bark is beautifully furrowed, the fruits clustered like hops. Valuable for dry situations.

## PERSICA—Peach

**P. sanguinifolia** (Greening's Blood-Leaved Peach)—Valuable because of its handsome blood-red foliage.

## DECIDUOUS TREES (Continued)

### PLATANUS—Plane Tree, Sycamore

This is a hardy tree and is well adapted for cities, where smoke, soot and dust gather upon shade trees and kill or seriously affect the foliage of other trees. It thrives well where other shade trees die.

- P. orientalis** (Oriental Plane)—One of the oldest cultivated trees and among the best for street and avenue planting. It grows rapidly to grand size, is bold, picturesque, hardy, healthy, free from insects, vigorous in all soils, especially along the water's edge. A lofty, wide-spreading tree, growing 60 to 80 feet tall, with large, leathery, clear-cut leaves that turn yellow in fall.

### POPULUS—Poplar

- P. alba Bolleana**—Similar to the well-known Lombardy Poplar in habit, but broader, and like it, useful in breaking the monotony of lower round-topped trees. Will grow to a tall spire, 80 feet high. Its leaves are glossy green above, silvery beneath. A favorite with landscape gardeners.

- P. deltoides var. Carolinensis**—Much like *P. monilifera*. Rapid grower. Good for screens.

- P. deltoides monilifera** (Carolina Poplar)—Unexcelled for quick growth and effect, its rapid growth giving an air of luxuriance to places where other trees appear starved. Showy and cheery from the constant movement of its glossy, silver-lined leaves, yet always casting a dense, cool shade. If well pruned back during the first few seasons it makes a strong, durable tree, 60 to 80 feet high.

- P. nigra italica** (Lombardy or Italian Poplar)—Attains a height of from 100 to 150 feet. Well known and remarkable for its erect, rapid growth and tall, spiry form. Indispensable in landscape gardening, to break the ordinary and monotonous outlines of most other trees.

- P. Van Geertii aurea** (Golden Poplar)—One of the finest golden-leaved trees for contrast groups, as it holds its color well throughout the season. Has all the fine vigorous characteristics of the species and grows to about the same height.

### PRUNUS—Plum, Flowering Plum

- P. cerasifera Pissardii** (Purple-Leaved Plum)—A distinct and handsome little tree, rarely over 20 feet high, covered with a mass of small white single flowers in spring, later with showy pinkish purple leaves that deepen in color to the end of the season. Valuable for ornamental hedges or planting in quantity for contrast. It is perfectly hardy wherever the common plum will stand and is a unique and

beautiful ornament to the lawn at all times of the year.

- P. padus** (European Bird Cherry)—A rapid growing, beautiful tree, with glossy foliage and long bunches of white, fragrant flowers in May, succeeded by clusters of fruit like black currants.

- P. triloba fl. pl.** (Double-Flowering Plum)—A charming shrub or small tree, 3 to 5 feet high, of spreading, vigorous growth. Very early in spring, before its leaves appear, the whole tree is decked in a fleecy cloud of very double, light pink blossoms. Its effect on a still, leafless landscape is very bright.

### PYRUS—Flowering Crab

- P. malus augustifolia, Bechteli** (Bechtel's Flowering Crab)—A low, bushy tree, rarely over 20 feet in height. It is the most beautiful of all the fine varieties of Flowering Crabs. At a distance the tree seems to be covered with dainty little roses of a delicate pink color. Blooms when quite young. Is very fragrant.

- P. malus baccata** (Siberian Crab)—Small, spreading tree; leaves bright green; flowers pure white and fragrant; ornamental fruit.

- P. malus floribunda**—Single flowers in wonderful profusion; beautiful carmine in bud; white when open. May. Fruit very ornamental in autumn.

- P. malus floribunda atrosanguinea**—Flowers crimson, produced in great profusion. A charming variety. May.

- P. malus Parkmanii**—Habit dwarf; a compact grower. Foliage dark green, remaining late on the tree. Flowers very double, dark rose, drooping and retain their color until they drop from the tree. A beautiful variety.

### QUERCUS—Oak

Although their growth at first is slow, if planted in good soil the oaks will outgrow many other trees. For wide lawns, parks, and public grounds, avenues, etc., where they have room to develop, few trees are so majestic and imposing, so enduring, so varied in expression. Their great vigor and hardihood enable them to withstand many untoward conditions.

- Q. alba** (White Oak)—Grandest of its genus and our American trees. A spreading, towering species, growing 100 feet high when fully developed, with rugged, massive trunk and branches. The deeply lobed leaves change to dark crimson in fall.



## DECIDUOUS TREES (Continued)

## QUERCUS (Continued)

**Q. coccinea** (Scarlet Oak)—A grand, round-topped tree 60 to 80 feet high, with bright green, deeply-cut leaves that color to sparkling red in fall.

**Q. palustris** (Pin Oak)—Almost pyramidal in habit and sometimes described as half weeping when old, because its lower branches touch the ground. It grows and develops the family characteristics faster than most oaks, as may be seen from some fine avenues planted within the last score of years. It grows 60 to 80 feet, sometimes taller. The leaves are deep green, glossy and finely divided. Orange scarlet in fall.

**Q. pyramidalis, or fastigiata**—Handsomeness, monumental, pyramidal oak, with dark green foliage. A fine subject for formal work.

**Q. robur** (English Oak)—The Royal Oak of England, a well-known tree of spreading, slow growth.

**Q. robur, var. fastigiata (pyramidalis)** (Pyramidal English Oak)—Slightly resembles Lombardy Poplar, though smaller and slower growing.

**Q. rubra** (Red Oak)—Stately, spreading, symmetrical; leaves shining deep green; rich fall color. A most beautiful tree for the lawn.

## ROBINIA—Locust or Acacia

**R. hispida** (Rose or Moss Locust)—A native species of spreading, irregular growth, with long, elegant clusters of rose-colored flowers in June and at intervals all the season.

**R. var. hispida rosea** (Hairy Locust)—Very low and shrubby, with beautiful, clear pink flowers in loose racemes. All parts of the plant, except the flowers, are bristly or hairy.

**R. pseudacacia** (Black or Yellow Locust)—A native tree, of large size, rapid growth and valuable for timber as well as quite ornamental. The flowers are disposed in long, pendulous racemes, white or yellowish, very fragrant, and appear in June.

## SALISBURIA—Ginkgo

**S. ginkgo biloba** (Maidenhair Fern Tree)—A distinguished Japanese tree, 40 to 60 feet high, of columnar growth when young, spreading with age into an odd sketchy outline. Its thick, leathery leaves are clear-cut and shaped like the leaves of the Maidenhair Fern. A rare and elegant tree that is yet robust enough to endure general city planting. Its unique appearance and habit of growth make it a valuable acquisi-



QUERCUS PALUSTRIS (PIN OAK)

tion. Grows fast; has no insect or fungous enemies.

## SALIX—Willow

Besides the beauty of their airy summer foliage, the Willows have a distinct value in the brightness of their bark when leaves have fallen. There are few trees that can be used to such advantage for cheery winter effects. They grow fast and are adapted to a variety of soils and uses. Frequent cutting back gives a thicker growth of bright young twigs.

**S. babylonica** (Weeping Willow)—Probably the best known of the Willows: weeping habit, with long, slender, olive-green branches; often grown in cemeteries.

**S. blanda** (Wisconsin Weeping Willow)—Of drooping habit and hardier than Babylonica. Valuable on account of its ability to resist severe cold.

**S. caprea var. pendula** (Goat or Pussy Weeping)—Branches spreading and drooping, forming an umbrella shaped head.

**S. pentandra** (Bay, or Laurel-Leaved Willow)—Ornamental tree of upright growth; bark brownish green; leaves dark glossy green; excellent for seashore planting.

## DECIDUOUS TREES (Continued)

### SALIX (Continued)

- S. incana* (Rosemary Willow) — Dwarf habit, feathery branches, silvery foliage; usually grafted on 5 to 6-foot stems, when it forms a dense, round top; useful in formal plantings.
- S. vitellina*, var. *britzensis* (Bronze-Barked Willow) — Salmon yellow young growth turning bronzy-red in fall.
- S. vitellina lutea* (Golden Willow) — A large and venerable appearing tree, conspicuous at all seasons, but particularly in winter, on account of its yellow bark.
- S. vitellina aurea pendula* — Similar in growth and color of bark to *S. vitellina*, but branches are pendulous.

### SASSAFRAS

- S. variifolium* — A really handsome medium-sized tree, 30 to 50 feet high, with fragrant, light green foliage and bark. Its small yellow flowers are attractive in early spring and followed later by dark blue fruits. Grows well even on thin soils.

### SOPHORA—Pagoda Tree

- S. japonica* (Japan Pagoda Tree) — An odd and unique specimen tree, 40 to 60 feet high, so different from other trees in style of growth that it always attracts attention. Its short branches form a dense, round head. In August its shining green leaves are decked with clusters of white blossoms.

### SORBUS—Mountain Ash

Medium-sized tree, with handsome, pinnate leaves, neat habit and showy crops of bright red berries, persistent until late in winter, giving a brilliant note to the autumn landscape.

- S. aucuparia* (European Mountain Ash) — Hardy, erect, 20 to 30 feet high, with smooth bark and dense, regular heads, berry clusters large and bright.
- S. pendula* (Weeping Mountain Ash) — The long, slender branches are recurved and form a parasol-like arrangement. Very choice for lawns.
- S. quercifolia* (Oak-Leaved Mountain Ash) — Of the same fine habit, but with dark, lobed leaves, downy underneath.

### TILIA—Linden, Basswood

The Lindens grow fast, forming noble trees of rounded outline, and casting a dense, cool shade. The leaves are large and cordate, the flowers light yellow, exhaling a delightful citron odor. All are among our best large-growing street and avenue trees; fine also for specimens and grouping.



CAMPERDOWN WEEPING ELM

- T. americana* (American Linden) — A stately tree, growing 60 to 80 feet tall, with large, shining cordate leaves. Particularly valuable for its beautiful white wood. Its flowers appear in July.
- T. tomentosa* (Silver-Leaved Linden) — Conspicuous among other trees because of its silver-lined leaves. These give it great brilliancy when ruffled by the wind. Handsome, vigorous, pyramidal in shape; 60 to 80 feet high.
- T. euchlora* (Crimean Linden) — Leaves tough and leathery; dark glossy green above and pale beneath with tufts of brown hairs on the axils of the principal veins; bright yellow bark in winter.
- T. vulgaris* (European Linden) — Very fine pyramidal tree of large size, having large leaves and fragrant flowers. Very desirable.
- T. platyphyllos* (Large-Leaved European Linden) — An exceedingly broad-leaved variety, growing into a noble tree 60 to 80 feet high. It flowers in June, the earliest of the Lindens.

### ULMUS—Elm

- U. americana* (American Elm) — Easily distinguished by its wide-arching top, vase-like form and pendulous branchlets. Next to the oak, this is the grandest and the most picturesque of American trees. Attains 80 to 100 feet. Dull yellow or brown in fall.
- U. campestris* (English Elm) — An erect, lofty tree, of rapid, compact growth, with smaller and more regularly cut leaves than those of the American, and darker colored bark. The branches

## DECIDUOUS TREES (Continued)

### ULMUS -- (Elm) continued

project from the trunk almost at right angles, giving the tree a noble appearance.

**U. campestris Wheatleyi** (Cornish Elm) —A narrow, pyramidal tree with ascending branches. Small dark green leaves. Retains its verdure the entire summer.

**U. glabra (scabra-montana)** (Scotch or Wych Elm) — Broad, round-topped head, spreading branches.

**U. glabra Camperdownii** (Camperdown Weeping Elm)—One of the finest

drooping lawn trees, the long branches spread horizontally in an attractive way and then gracefully turn down, forming a picturesque, natural arbor or summer-house.

**U. g'abra fastigiata pyramidalis**—An elegant, pyramidal-growing elm, with a light, feathery appearance. Rare.

**U. racemosa** (Cork Elm)—Short, spreading branches forming an oblong round-topped head. Branchlets irregularly corky-winged after the second year.

## Salesmen

## Wanted

We want salesmen in all our unoccupied territory. We want men of good local reputation. We want men who can and will give their best energy to building up a permanent business and to such we offer our co-operation.





SAMBUSCUS (ELDER)

## SHRUBS

Flowering shrubs and plants, and those with brilliantly colored foliage, are to landscape gardening what the finishing touches are to a picture or the decorations to a room. They help to fill out the well-rounded forms of groups of trees, and, possessing more variety of colors and foliage than the trees, they add beautiful bits of color and pleasing contrasts. Being of small size, they are especially useful in small gardens and borders, for ornamenting the foreground of groups of trees and evergreens, and in particular they serve a purpose of a setting or ornamentation close to the dwelling. A driveway or walk may be effectually hidden and broken here and there by dwarf plantings exhibiting fresh charms, surprisingly delightful to the eyes as they fall upon new views. To give a walk or drive new interest by its curves and windings, and to plant with the choicest of trees and shrubs that add half-hidden beauties of flowers, foliage and wood at every turn, is the test of any work in landscaping.

Shrubs must suit the object for which they are grown. Often a fine lawn is spoiled by having thrust in here and there trees and shrubs without relation to method, purpose or design. They are best planted in groups with due consideration of size, character of growth and effect. They afford excellent screens for undesirable objects, such as chicken yards, old buildings and fences, and the effect of a shrub border for a front or back lawn, produced by careful setting, is always a pleasing one. Beautiful color effects are obtained by selecting shrubs with foliage of contrasting colors. The silver, golden, purple and many shades of green, if carefully arranged according to Greening's latest method, never fail to catch the eye and leave a pleasing effect.

Shrubs vary in size from dwarf to tall—there are scarcely two varieties which produce the same effect. With the exception of a little pruning and an occasional stirring of the soil, shrubbery practically takes care of itself.



We are enclosing a check in payment of your bill for trees. We received this shipment very promptly; in fact, on the exact date that you stated in your letter that we should receive them, and I certainly am very much pleased indeed with the way they look.

JOHN H. SMITH,  
Port Huron, Mich.

## SHRUBS (Continued)

## AMELANCHIER

- A. oblongifolia** (Dwarf Shad Bush)—White flowers in May followed by red fruit nearly black. Best use among evergreens.
- A. canadensis** (Service Berry)—A bushy shrub flowering in May, followed by fruit of a maroon-purple in June. Very profuse bloomer. Color of flower, white.
- A. rotundifolia** (Service Berry)—Shrub 2 to 8 feet high. Blooms profusely in May followed by bluish-black berries in August. Flowers white.
- A. vulgaris** (European Service Berry)—Very similar to *A. rotundifolia* immediately above. Blooms in May.

## AMORPHA

- A. fruticosa** (False Indigo)—Grows 6 to 10 feet high and forms a large, spreading bush, with compound leaves, containing 10 to 20 bright green leaflets and slender spikes of deep violet-blue flowers in June, after the flowers of most shrubs have faded.

## AMYGDALUS

- A. communis** (Flowering Almond)—In full bloom before leaves appear. Dwarf, bushy and compact. Flowers double, of rose or white.

## ARALIA—Angelica Tree

- A. acanthopanex pentaphyllum**—A pretty Japanese shrub, of medium size and rapid growth; branches furnished with spines; leaves pale green. Blooms in June.
- A. spinosa** (Hercules' Club, Devil's Walking Stick)—A native plant, valuable for producing tropical effects.

## AZALEA

In early spring the Azaleas make a gorgeous show of bloom. A good way to plant them is among Rhododendrons, for they thrive in the same kind of soil and under similar conditions, besides brightening the shrubbery with their flowers before the Rhododendrons are ready to bloom.

- A. mollis**—The large flowers are produced in great trusses and in different shades of red, white, yellow and orange, rivaling the Rhododendron *Catawbiense* in size and beauty. The plants grow 2 to 3 feet high and in early spring are covered with a mass of bloom before the leaves appear.

## BACCHARIS—Groundsel Tree

- B. halimifolia**—A pretty shrub with dark green foliage, especially attractive in autumn with its fluffy white seed-pods.

## BENZOIN

**Benzoin aestivale (odoriferum)** (Spice Bush)—An attractive shrub, valued for its handsome flowers, which come before the leaves in early spring. Foliage turns bright yellow in autumn. Flowers yellow in April. Fruit scarlet and conspicuous.

## BERBERIS—Barberry

There is a charm about the Barberries hard to describe, and no more practical and beautiful shrub can be grown. Their masses of white, yellow or orange flowers are showy in spring, their leaves color brightly in fall, their scarlet, blue or black berries are persistent through most of the winter. They make a dense low hedge, will stand any amount of shearing, are perfectly hardy and will grow in any sunny, well-drained position. Three varieties of the Barberry harbor the black rust on wheat. As soon as we had reliable information from good authority that this was a fact we destroyed our entire stock of *B. ilicifolia*, *B. vulgaris* and *B. purpurea* and do not now propagate those varieties.

**B. Thunbergii** (Thunberg's Barberry)—From Japan. A pretty species, of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.

## BOX-BARBERRY

This new Barberry solves the problem of the garden border for northern gardens.

**Box-Barberry**—A dwarf, upright form of the popular *B. Thunbergii*. It is perfectly hardy, thriving wherever the Barberry grows. It does not carry wheat-rust. It lends itself most happily to low edgings for formal gardens when set from 4 to 6 inches apart and kept trimmed. Also makes a beautiful low hedge when set 6 to 12 inches apart. The foliage is a pleasing light green, changing in autumn to rich reds and yellows.

## BUDDLEIA—Butterfly Bush

One of the most admired shrubs. Of quick, bushy growth. The lovely bloom spikes appear in July. Bloom radiates a delightful perfume. Freezes down in winter but grows again rapidly each spring, attaining a height of five feet in July.

**B. Lindleyana**—This variety selected of several good sorts as being the most desirable. Flower spikes erect, 3 to 5 inches long and of a beautiful purplish-violet. Although it freezes down it will grow again and bloom each year in July.

## SHRUBS (Continued)

### CALYCANTHUS—Carolina Allspice

- C. fertilis glaucus*—The wood is fragrant, foliage rich; flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

### CARAGANA—Pea Shrub

- C. arborescens*—Makes a very handsome show in the late spring with its compound, bright green foliage and numerous small clusters of bright yellow flowers. Perfectly hardy and valuable for either group or individual planting.

### CARYOPTERIS

- C. incana* (Blue Spirea)—A pretty autumn-blooming shrubby plant, producing clusters of beautiful blue fragrant flowers in great profusion from September until frost. Dies to the ground here in winter.

### CEANOTHUS

- C. americanus* (New Jersey Tea or Red Root)—A low-growing shrub; flowers white in June. Valuable for shady places.

### CEPHALANTHUS—Button Bush

- C. occidentalis*—A tall-growing native shrub with globular heads of white flowers in July.

### CHIONANTHUS—Fringe Tree

- C. virginica* (White Fringe Tree)—A small, tree-like shrub, much admired for its curious fringe or hair-like flowers that cover the whole surface in midsummer.

### CLETHRA

- C. alnifolia* (Sweet Pepper Bush)—A native shrub of low and dense growth; leaves abundant and light green; has numerous spikes of small white fragrant flowers. Blooms abundantly in July.

### COLUTEA

- C. arborescens* (Bladder Senna)—Of quick growth in any dry, sunny situation, forming graceful clumps of delicate foliage. Its long racemes of yellow and cinnabar-red pea-shaped flowers appear in summer, and are followed by large, showy red seed-pods.

### CORNUS—Cornel or Dogwood

Valuable shrubs when planted singly or in groups or masses, some distinguished by their elegantly variegated foliage, others by their bright-colored bark.



BUDDLEIA (BUTTERFLY BUSH)

- C. alba* (Red - Branched Dogwood)—Very conspicuous and ornamental in winter, when the bark is blood-red.

- C. amomum* (Silky Dogwood)—Flowers white, fruit blue, branches red and spreading.

- C. elegantissima variegata*—One of the finest variegated shrubs; of rapid growth; the leaves are broadly margined with white, while some are entirely white. Bark bright red in winter.

- C. alba Spaethii*—While the variegation in *elegantissima* is white, in this variety it is pale yellow. One of the finest variegated shrubs.

- C. mascula* (Cornelian Cherry)—A small tree, producing clusters of bright yellow flowers early in spring, before the leaves, followed by red berries.

- C. paniculata* (Gray Dogwood)—Smooth ash-colored bark; pointed leaves, light-green above, whitish beneath; flowers greenish white; fruit white.

- C. sanguinea* (European Red Osier)—Flowers white, fruit black, branches bright red and upright.

- C. stolonifera* (Red Osier Dogwood)—A native species, with smooth, slender branches, which are usually red in winter.

- C. var. flaviramea* (Yellow - Branched Dogwood)—Bright yellow bark in winter, particularly effective in shrubberies planted with the Red-Branched Dogwood.

## SHRUBS (Continued)

### CORYLUS—American Hazel Nut

- C. americana** (American Hazel Nut)—The well-known hazel nut.
- C. avellana** (European Filbert or Hazel Nut).
- C. avellana atropurpurea** (Purple-Leaved Filbert)—A very conspicuous shrub, with large, dark purple leaves. Distinct and fine.
- C. var. laciniata** (Cut-Leaved Filbert)—A very ornamental shrub, with deeply cut foliage.

### CYDONIA—Japan Quince

- C. japonica** (Pyrus Japonica) — Very early in spring this fine old shrub is completely covered with dazzling scarlet flowers. The leaves are deep green and glossy, the growth tall, bushy, twiggy, with stout branches armed with fierce thorns. The quince-shaped fruits are quite fragrant. It makes a beautiful flowering and defensive hedge; grows naturally 3 to 6 feet high, but bears any amount of shearing.
- C. var. Mau'ei**—Beautiful orange-colored flowers; a distinct shade; fine.
- C. var. Maulei superba**—Large bright red flowers.
- C. var. Sargenti**—Discovered in Japan. Bright red flowers; very floriferous.

### DESMODIUM

The Desmodium or, as it is called by some authorities, Lespedeza, is mostly listed as a perennial, as it dies down in winter, but is perfectly hardy. It is valuable for planting in front of shrubbery and its long, drooping racemes of purplish rose flowers are distinctly ornamental.

### DEUTZIA

No other shrub in the whole list will yield better returns for a minimum of care than the Deutzias. They vary greatly in height and habit, but all have dainty bell or tassel-shaped flowers borne thickly in wreaths along their branches in June. The taller sorts are useful for specimens, groups, and the background of shrubberies; the dwarfer for borders or for planting near the house or in front of the piazza.

- D. scabra crenata**—The beautiful white, single-flowered species, growing 6 to 8 feet tall, and a mass of bloom in early June.



CYDONIA JAPONICA

- D. scabra candidissima**—The pure white double flowers in erect panicles 2 to 4 inches long are so perfect in shape that they are frequently used as cut-flowers. The bush is neat and shapely, growing 6 to 8 feet high, and is a handsome addition to any planting.
- D. gracilis** (Slender-Branched Deutzia) —A neat, dense little bush, rarely over 2 feet high, that blooms in May, wreathing its drooping branches with pure-white flowers. Equally valuable for shrubberies and forcing.
- D. gracilis var. rosea plena**—Similar to the above but the flowers are double and tinged with soft old rose. Beautiful.

## SHRUBS (Continued)

**DEUTZIA CRENATA****DEUTZIA (continued)**

**D. hybrida Lemoinei**—A hybrid obtained by crossing the well-known *Deutzia gracilis* with *Deutzia parviflora*. Flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf and free-flowering.

**D. Lemoinei**—Rarely growing over 3 feet high, with spreading branches, it has bright green leaves 2 to 3 inches long and white flowers grown in large clusters in early summer.

**D. scabra var. Pride of Rochester**—A showy, early and large-flowering sort, that blooms in May before the others. Grows 6 to 8 feet tall. The white flowers are large and double, tinted with pink.

**D. scabra**—Flowers bell-shaped, in small bunches; foliage oval, very rough underneath; tall grower.

**D. scabra var. rosea pleno**—A strong grower, similar to *D. scabra* but the flowers are tinted rosy white.

**DIERVILLA—Weigela**

Another valuable genus from Japan. Shrubs of erect habit while young, but gradually spreading and drooping as they acquire age. They produce in June and July superb large trumpet-shaped flowers of all shades and colors from pure white to red. In borders and

groups of trees they are very effective and for margins the variegated-leaved varieties are admirably suited, their gay-colored foliage contrasting finely with the green of other shrubs. They flower after the Lilacs in June.

**D. (W.) amabilis**—A beautiful distinct pink-flowering sort of this valuable shrub.

**D. (W.) candida** (White-Flowered Weigela)—Of vigorous habit, an erect grower, becoming in time a large-sized shrub; flowers pure white and produced in great profusion in June and the plants continue to bloom through the summer, even until autumn. A valuable variety.

**D. (W.) Desboisii**—One of the best. Flowers a clear very deep rose-pink.

**D. var. Eva Rathke**—Flowers brilliant crimson; a beautiful, distinct, clear shade.

**D. (W.) floribunda**—A June-flowering variety of tall growth. The flowers are small but numerous and a beautiful crimson when fully open.

**D. (W.) rosea** (Rose-Colored Weigela)—An elegant shrub, with fine rose-colored flowers; of erect, compact growth; blossoms in June.

**D. var. rosea nana variegata** (Variegated-Leaved Dwarf Weigela)—Of dwarf habit and possessing clearly defined, silvery variegated leaves; flowers delicate rose pink. It stands the sun well and is one of the best dwarf variegated-leaved shrubs.

**DIERVILLA (WEIGELA) ROSEA**



## SHRUBS (Continued)

## DIERVILLA --(Weigela) continued

- D. (W.) *Steltzneri*—Another variety of this well-known shrub with dark red flowers.
- D. (W.) *Van Houttei*—Flowers broad and flat. Deep rosy red with orange markings.

## ELAEAGNUS—Oleaster

- E. *agustifolia* (Russian Oleaster)—Silvery green foliage, yellow flowers and fruit, make this tall shrub desirable for borders.
- E. *longipes* (Japan Oleaster)—In July the plant is covered with bright red berries of large size and edible, the flavor being pungent and agreeable. Laden with fruit the bush is highly ornamental, and the fact that the leaves remain fresh till late in the autumn gives it additional value for garden decoration.

## EUONYMUS

## Strawberry or Spindle Tree

The Euonymus are all highly ornamental in autumn, when covered with showy fruit.

- E. *alatus* (Cork-Barked Euonymus)—Of dwarf, compact habit; wood very corky; leaves small; fruit red. Very beautiful in autumn when foliage turns bright red.
- E. *americanus* (American Burning Bush)—A tall-growing shrub with larger leaves than the European, turning to scarlet in autumn; fruit large, dark red.
- E. *europaeus* (European Euonymus)—Forms a tree sometimes 30 feet in height. Fruit white and rose-colored.

## EXOCHORDA—Pearl Bush

- E. *grandiflora*—From North China. A fine shrub, producing large white flowers in May. Difficult to propagate and always scarce. One of the finest shrubs of its season.

## FORSYTHIA—Golden Bell

These splendid old shrubs, growing 8 to 10 feet in good soil, light up the garden with glinting masses of yellow very early in spring, before the leaves appear, and usually blooming with the Crocuses which are frequently planted in front of and beneath them. All are of strong growth, entirely hardy with curvy branches that sometimes root at their tips; stems and leaves retain their color until late fall.

- F. *suspensa Fortunei*—Handsome, erect form; very vigorous grower and very prolific bloomer. Flowers golden and continue a long time. It is a conspicuous object in shrubbery.

- F. *suspensa Fortunei* var. *aurea variegata*—Similar to above but the leaves are beautifully variegated. Very attractive when massed in front of evergreens.

- F. *intermedia*—One of the most floriferous, with slender, arching branches and dark green, lustrous leaves. It blooms so early that it is frequently covered with its bright golden flowers while the ground is covered with snow and is one of the very first promises of the bright and beautiful spring days to follow.

- F. *suspensa*—Long, curving branches, used for covering arches and trellises.

- F. *viridissima*—The flowers of this variety are a little deeper yellow than in other sorts and are sometimes twisted. The bush is not quite so hardy as the others of the species and it is best to give it some slight protection in winter in northern latitudes.

## HAMAMELIS—Witch Hazel

- H. *virginiana*—Valuable because its fringe-like yellow flowers open so late in fall—often in November—when there are few other blossoms outdoors anywhere. Grows 10 to 15 feet tall, with fine leaves that color to yellow, orange or purple in fall and drop before the bright yellow flowers with narrow, twisted petals appear, making them quite conspicuous among bare branches. Likes a moist, sandy, or peaty soil and partial shade.

I am glad to tell you my stock reached me very promptly and in fine condition. Everything is growing satisfactorily.—Mrs. J. A. DeGrabb, Grand Rapids, Mich.

I planted 468 trees bought of you, all of which are doing fine.—John H. Dawson, Milford, Mich.

I got my trees from you five years ago, to set out my orchard, and am well pleased with them. I want more.—Jasper Goins, Sodus, Mich.



## SHRUBS (Continued)



HIBISCUS (ALTHEA)

## HIBISCUS—Althea, Rose of Sharon

The Altheas are fine free-growing flowering shrubs, of very easy cultivation, desirable on account of flowering in August and September, when nearly all other trees and shrubs are out of bloom. Tender in some localities.

We can furnish these by color in blue, pink, pink and white, purple, red, white, white with crimson center and the bi-color or white with red markings or the following named varieties. Order by color or name the special "named variety" you want.

**H. var. Boi'e de Few**—Flowers double and of a very deep violet pink.

**H. var. Jeanne d'Arc**—Flowers pure white, double; plant a strong grower.

**H. var. Leopoldii flore pleno**—Large flowers, very double, flesh color, shaded rose; fine.

**H. syriacus var. flore pleno fol. var.** (Variegated-Leaved, Double Purple-Flowered Althea)—Foliage finely marked with light yellow, double purple flowers. One of the finest variegated-leaved shrubs.

**H. var. variegatis flore pleno** (Double Variegated or Painted Lady Althea)—White with purple outside; petals shaded pink.

We can also furnish this shrub in tree form if desired. Order by color.

## HIPPOPHAE—Sea Buckthorn

**H. rhamnoides**—Foliage grayish white; quite attractive. Succeeds particularly well near salt water.

## HYDRANGEA

**H. arborescens sterilis** (Hills of Snow)

—This superb new Hydrangea is absolutely hardy and, moreover, of easy culture, and is an exceedingly prolific bloomer; as high as 125 perfect blossoms with an average of six inches in diameter have been found on a single plant at one time. Color is pure white, which is retained usually from four to five weeks. The flower clusters remain intact long after the leaves have fallen and frequently throughout the following winter.

**H. paniculata grandiflora** (Panicked

Hardy Hydrangea)—Familiar to almost everyone as the most conspicuous shrub in any collection during August and September. Its massive plumes of white flowers bend the branches with their weight, changing finally to pink and bronzy green. The shrub shows best to advantage when grown in rich beds or masses and cut back severely every spring before growth starts. Grown in this way, it produces fewer flower-heads but much finer ones. Sometimes grown in tree form, making a strong, vigorous bush 6 to 8 feet high. Needs close pruning and good fertilizing in order to produce choice flowers.

**H. Tree Form** (Tree Hydrangea)—A

splendid specialty. Free flowering. Grows into fine tree shape, often to 7 to 8 feet in height. Imported from Holland. Very fine.

## HYPERICUM—St. John's-Wort

**H. kalmianum**—A fine shrub with good foliage. Flowers yellow, blooming in July and September. Excellent in shrub borders.

**H. moserianum** (Gold Flower)—A showy, half-pendulous shrub, growing only a foot or two in height and fine for massing or for growing in perennial borders, or in front of high shrubbery. Its glossy bright yellow flowers are two or more inches in diameter and tufted with masses of yellow stamens, blooming in midsummer. May be grown in shaded places where few other plants will thrive.

## KALMIA—Laurel

**K. latifolia** (American Laurel)—A beautiful native shrub of easiest culture. Particularly good along streams. Flowers rose to white in May and June.



HYDRANGEA PANICULATA GRANDIFLORA

## SHRUBS (Continued)

## KERRIA—Corchorus

**K. japonica** (Japan Corchorus)—A slender, green-branched shrub, with globular yellow flowers from July to October.

**K. var. flore pleno** (Double-Flowered Corchorus)—Of medium size; double yellow flowers.

**K. var. argentea variegata** (Silver Variegated-Leaved Corchorus)—A dwarf variety from Japan, with small green foliage edged with white; very slender grower. One of the prettiest dwarf shrubs.

## LIGUSTRUM—Privet

Besides being one of our best hedge plants, the different species of the Privet form interesting groups on the lawn. They are almost evergreen, and of dense, shapely habit. Their white flowers grow in pretty sprays, are fragrant, and followed by berries of different colors.

**L. amurense** (Amoor River Privet)—The Chinese variety, hardier than the others, growing 8 to 12 feet high, with dark green leaves which persist almost through the winter. Evergreen in the south. Bears erect panicles of handsome white flowers in June followed by black berries. The best for hedges.

**L. ibota**—A fine and hardy border shrub, of spreading habit, with curving branches and leaves of grayish green. Pure white flowers in June fol-

lowed by bluish-black seeds. Considered among the hardiest of privet varieties. Makes an excellent hedge.

**L. ovalifolium** (California Privet)—A species of unusual beauty that has become the most popular of all hedge plants. Its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desired shape.

**L. regelianum**—The horizontal, sometimes drooping branches, are distinctly beautiful. Has longer and narrower leaves than other varieties. This is one of the best of privets. Absolutely hardy and graceful. Berries remain on all winter and are very attractive.

**L. vulgare** (Common Privet)—A good hedge plant with narrow dull-green foliage and quite showy flowers of white. Blooms June and July. Clusters of black berries follow the bloom which adhere to the shrub all winter.

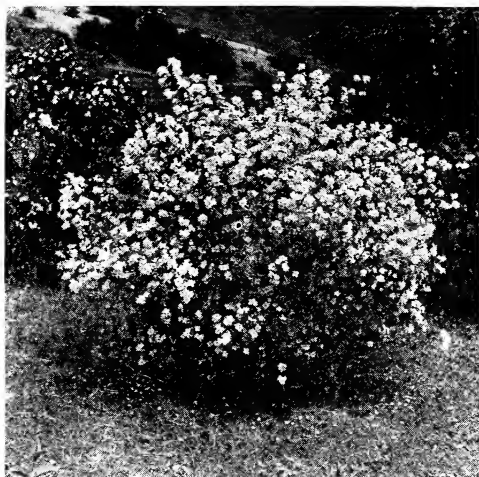
## LONICERA—Upright Honeysuckle

The following species and varieties are of erect, shrubby habit. Valuable for their handsome flowers and showy fruit. The climbing sorts will be found under the head of Climbing Shrubs.

**L. spinosa Alberti**—Violet bell-shaped flowers; leaves narrow. A very hardy variety, somewhat creeping.

**L. bella al'bida**—White flowers; showy red fruit in great profusion; fine.

## SHRUBS (Continued)



**PHILADELPHUS**  
(SYRINGA OR MOCK ORANGE)

**LONICERA (continued)**

- L. fragrantissima** (Fragrant Upright Honeysuckle)—A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves, foliage almost evergreen; most desirable.
- L. Morrowii**—A fine variety from Japan; valuable for its handsome red fruit.
- L. Ruprechtiana**—A fine variety from Manchuria, particularly valuable for its showy red fruit.
- L. tatarica** (Tartarian Honeysuckle)—Pink flowers which contrast beautifully with the foliage. This and *grandiflora* appear to fine advantage planted together. June.
- L. tatarica var. alba** (White Tartarian Honeysuckle)—Forms a high bush, with creamy-white, fragrant flowers. May and June.
- L. tatarica var. rubra**—Similar to above but with deep rose-pink flowers in early summer.
- L. tatarica var. grandiflora** (Pink-Flowered Honeysuckle)—A beautiful shrub, very vigorous, and producing large, bright-red flowers striped with white, in June.

**MACLURA**

- M. pomifera** (Osage Orange)—Chiefly grown as a hedge plant. Also planted as an ornamental tree for its handsome bright-green foliage and the conspicuous orange-like fruit.

**PHILADELPHUS****Syringa or Mock Orange**

The *Syringa* is an invaluable shrub. Of vigorous habit, very hardy, with large, handsome foliage and beautiful white flowers, produced in the greatest profusion at the blossoming season, it merits a prominent place in all collections of shrubbery. Most of the varieties, except those of dwarf habit, form large-sized shrubs, twelve to fifteen feet high. They can of course be kept smaller by pruning. The dwarf sorts are such pretty, compact plants as to be very useful where small shrubs are desired. All of the varieties flower in June, after the *Weigela*. By planting the late-flowering sorts, the season may be considerably extended.

**Ph. coronarius** (Garland *Syringa*)—A well-known shrub, with pure white highly scented flowers. One of the first to flower.

**Ph. coronarius fol. aureis** (Golden *Syringa*)—A compact shrub with very brilliant yellow foliage in the spring. Holds its color well. Good for contrast with dark-leaved shrubs. Flowers white in May and June.

**Ph. coronarius Var. flore pleno** (Double-Flowered *Syringa*)—A variety with partially double, very fragrant flowers.

**Ph. coronarius Foliis Aureis** (Golden-Leaved *Syringa*)—A very pretty plant of medium size, with golden-yellow foliage. It keeps its color the entire season and will be found valuable for creating pleasing and striking contrasts with purple-leaved shrubs.

**Ph. Lewisii** (Gordon's *Syringa*)—A vigorous grower and profuse bloomer; flowers slightly fragrant blooms late, and valuable on that account.

**Ph. grandiflorus** (Large-Flowered *Syringa*)—Has very showy large flowers, slightly fragrant; branches somewhat straggling.

**Ph. Lemoinei** (Lemoine's *Syringa*)—Branches slender and arching. Flowers double in large racemes, very sweet-scented. One of the best dwarf spring-flowering shrubs. Color of bloom white, and time of bloom May.

**Ph. Lemoinei var. Avalanche**—Very erect in growth. Leaves small and narrow. Branches slender and covered with showy white flowers in May and June.

**Ph. nivalis**—The stamens of this variety are cream-colored, thus rendering the whole flower snowy white. Flowers inodorous.

## SHRUBS (Continued)

## PRUNUS—Plum and Almond

*P. japonica flore plena alba* (Dwarf Double White-Flowered Almond)—Produces beautiful double white flowers in May.

*P. japonica flore plena rubra* (Dwarf Double Red-Flowered Almond)—A beautiful small shrub, bearing in May, before the leaves appear, an abundance of small, double, rose-like flowers, closely set upon the twigs.

*P. cerasifera Pissardi* (Purple-Leaved Plum)—The finest purple-leaved small tree or shrub. The leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in autumn; no other purple-leaved tree or shrub retains its color like this. Flowers small, white, single, covering the tree.

*P. triloba* (Double-Flowered Plum)—Native of China. Flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long, slender branches; flowers in May.

## PTELEA

## Hop Tree, or Shrubby Trefoil

*P. trifoliata*—A large shrub or small tree of rapid growth and robust habit. Fruit winged, and in clusters; flowers in June.

## RHAMNUS—Buckthorn

*R. alpina* (Alpine Buckthorn)—Of upright growth, attaining about six feet. Desirable on account of its handsome foliage, which is of a dull, rich green color.

*R. cathartica* (Purging Buckthorn)—A fine, robust, hardy shrub, of European origin, with dark green foliage, white flowers and small black fruit.

## RHODOTYPUS—White Kerria

*R. kerrioides*—From Japan. A very ornamental shrub of medium size, with handsome foliage and large, single, white flowers in the latter part of May, succeeded by numerous small fruit.

## RHUS—Sumach

*R. aromatica* (Fragrant Sumach)—A native variety, exhaling a strong odor. Flowers greenish white; leaves lobed.

*R. copallina* (Dwarf Sumach)—Shining Sumach. Beautiful shining green foliage, changing to rich crimson in autumn. Greenish-yellow flowers in August.



SPIREA PRUNIFOLIA

## RHUS (Continued)

*R. Cotinus* (Purple Fringe, or Smoke Tree)—From the south of Europe. A much-admired shrub for its curious fringe, or hair-like flowers, that cover the whole surface of the plant in mid-summer. It grows 10 to 12 feet high and spreads so as to require considerable space.

*R. glabra* (Smooth Sumach)—Very effective in autumn with its crimson seeds and foliage.

*R. Var. laciniata* (Cut-Leaved Sumach)—A very striking plant, of moderate size, with deeply cut leaves, resembling fern leaves; dark green above and glaucous below, and turning to a rich red in autumn.

*R. typhina* (Staghorn Sumach)—A large shrub or tree, brilliant foliage and scarlet fruit in autumn.

*R. Var. laciniata* (Cut-Leaved Staghorn Sumach)—A picturesque form with handsome leaves and deeply cut leaflets.



## SHRUBS (Continued)



**RHUS COTINUS**  
(PURPLE FRINGE OR SMOKE TREE)

**RIBES—Currant**

The flowering currants are gay, beautiful shrubs in early spring and of the easiest culture.

**R. aureum** (Yellow-Flowered or Missouri Currant)—A native species with glabrous, shining leaves and yellow flowers.

**R. Gordonianum**—Flowers large, of purple-rose. Blooms in May, followed by blue-black fruit. Leaves dark green, 2 to 3 inches across. A useful and attractive shrub.

**R. sanguineum** (Crimson-Flowered Currant)—An American species with deep red flowers, produced in great abundance in early spring.

**ROBINIA—Rose Acacia**

**R. hispida** (Rose Acacia)—A pretty low shrub with showy rose-colored flowers borne in loose clusters in May and June. Good in masses and on dry banks. As it spreads from its roots like the raspberry it should not be planted where it will interfere with other shrubs.

**ROSA RUGOSA AND ITS HYBRIDS**

This type of the Rose family is much used in landscape work. It is perfectly hardy, its growth upright. Height about six feet. Its leaves are a dark, lustrous green and it is not annoyed by insect pests. Its flowers are followed by bril-

liant red fruit which gives it a peculiar charm in late fall and early winter. It is valuable for hedges and borders. Refer also to matter under Roses.

**Var. alba**—White-flowered.

**Var. rosea**—Rosy-pink.

**Var. rubra**—Red.

**ROSA RUBIGNOSA**

This type of Rose is grown more for its fragrance than its beauty. Dense growing; height six feet. Very hardy and is used extensively in landscape work. See matter under Roses.

**ROSA SETIGERA**

Of the Rose family but really a beautiful shrub. Valuable in massed plantings in landscape work. Refer to matter under Roses.

**ROSA RUBRIFOLIA**

Used to secure color effect in landscape work. The leaves are blue-green, deeply tinged with purplish-red. Fruit scarlet, which adds much to its attractiveness in early winter. It is a good substitute for the purple barberry.

**RUBUS**

**R. odoratus** (Flowering Raspberry)—A strong-growing plant from 3 to 6 feet high. Leaves very large. Flowers one-half inch in diameter, of rose-purple, from several to many in the cluster. Prefers rich, shady situations. It is beautiful in a foliage mass, spreading rapidly and soon overtops weaker plants. Valuable for landscape work and effects.

**SAMBUCUS—Elder**

These are showy, rapid-growing, large shrubs, quite ornamental in flowers, fruit and foliage. They blossom in June. The plants should be kept in good shape by a frequent use of the pruning knife.

**S. canadensis** (Common American Elder)—Broad panicles of white flowers in June; reddish-purple berries in autumn. A well-known native shrub.

**S. var. acutiloba** (Cut-Leaved American Elder)—A beautiful variety with deeply and delicately cut dark-green foliage. It is valuable on account of its beauty, hardiness and rapid growth and the ease with which it is transplanted. We consider it one of the best cut-leaved shrubs in cultivation.

**S. nigra var. aurea** (Go'den Elder)—A handsome variety, with golden-yellow foliage. A valuable plant for enlivening shrubberies.

**S. nigra var. variegata** (Variegated Elder)—Leaves are quaintly mottled with white and yellow. Flowers and growth like the type.

## SHRUBS (Continued)



SPIREA (ANTHONY WATERER)

## SAMBUCUS -- Elder (continued)

- S. nigra* (Black-Berried Elder)—A native of Europe, of medium size, with purplish-black berries in September.
- S. nigra* var. *laciniata* (Cut-Leaved European Elder)—A handsome and distinct form, the leaves of which are regularly and finely dissected.
- S. racemosa*, Syn. *Pubens* (Red-Berried Elder)—Panicles of white flowers in spring, followed by bright-red berries.

## SPIREA

This shrub is adapted for banking against buildings, porches or formal effect. Needs two prunings during the summer. Very effective.

- S. arguta* (Snow Garland)—A slender dwarf, 3 to 5 feet high, with branches a snowy mass of clear white flowers in early May.
- S. Anthony Waterer*—A new form of better habit than the type, with larger corymbs of rosy crimson.
- S. atrosanguinea*—Dark red or rose flowers in June and July.
- S. aurea*—Tall-growing shrub. The leaves are bright yellow in spring, gradually changing to golden brown in fall. Flowers double white.
- S. Billardi*—A narrow dense shrub, 6 feet high, with dense panicles of rich-pink flowers in July and August, also in fall.

*S. Bumalda*—Compact, low-growing, with good dense foliage sometimes variegated when young. Flowers in showy flat clusters borne on erect stems. Excellent in masses in front of taller shrubs. If the flowers are cut when they fade it will continue to bloom until frost. Flowers pink in July and August.

*S. callosa alba* (*S. japonica*, of some)—Of dwarf, compact growth, 4 feet high, with upright branches and bluish-green foliage; crowded with large, flat clusters of white flowers nearly all summer.

*S. callosa japonica*—Pink-flowered spirea of compact growth about 4 feet high. Flowers small and pink. Blooms nearly all summer.

*S. Douglasi*—Upright in growth to 5 or 7 feet, with reddish-brown branches and narrow, oblong leaves. Bears spikes of beautiful, deep rose-colored flowers in July and August.

*S. Fortunei*—Has large panicles of deep rosy blossoms all summer. One of the finest spireas.

*S. opulifolia aurea* (Golden Ninebark)—This and the next are sometimes classed under *Physocarpus* or *Ninebark*. They make a much stronger growth than most sorts, growing rapidly upright to 10 feet, although their branches droop when laden with white flowers.

*S. prunifolia, flore pleno* (Bridal Wreath)—Among the earliest of the double spireas to bloom, very graceful and plume-like in effect, branches being covered thickly almost their whole length with small, double white flowers and sweeping outward in gentle curves.

SPIREA THUNBERGII  
(THUNBERG'S SPIREA)



SYRINGA (LILAC)  
"President Grevy"

## SHRUBS (Continued)

### SPIREA (continued)

- S. Reevesiana** (Reeves' Double Spirea)—Tall and graceful, 5 to 8 feet high, with dark, bluish-green lance-like foliage and large, pure white double flowers in May and June.
- S. sorbaria sorbifolia**—A distinct species with large compound leaves and large heads of white flowers.
- S. Thunbergii** (Thunberg's Spirea)—Distinct and most attractive at all seasons, with feathery masses of pure white flowers in early spring; in autumn its narrow leaves change to bright red and orange. Forms a dense, feathery bush.
- S. Van Houttei** (Van Houtte's Spirea)—One of the most charming and beautiful of the spireas, having pure white flowers in clusters or panicles about an inch in diameter. Astonishingly profuse in bloom and plants remarkably vigorous and hardy. A grand shrub for planting singly or in groups or as a banking against buildings. Makes one of the best shrub hedges.

### STEPHANANDRA

- S. flexuosa**—A beautiful low shrub with very ornamental, deep green, dense

foliage. Branches spreading and drooping. Flowers insignificant, white in July. In exposed places it kills to the ground in winter but regains its growth quickly in the spring.

### STYRAX

- S. japonica**—Leaves resemble those of the Dogwood; nodding, pure white flowers, bell-shaped and arranged in pendulous groups.

### SYMPHORICARPUS

- S. racemosus** (Snowberry White)—A well-known shrub with small pink flowers and large white berries that will remain on the plant through part of the winter. The white berries are the most attractive characteristic of the shrub.
- S. vulgaris** (Snowberry Red, or Indian Currant)—Similar to the Snowberry White, except that the berries are smaller and red in color. The habit is of slightly drooping nature and of vigorous growth. Succeed in shady places.



## SHRUBS (Continued)

## SYRINGA—Lilac

Well-known beautiful shrubs, indispensable in every collection. They flower in May.

**S. chinensis var. alba**—A vigorous grower; foliage small and narrow; flowers white with a bluish tint. Fragrant and free flowering.

**S. chinensis var. rubra** (Rouen Lilac)—A distinct hybrid variety, with reddish flowers; panicles of great size and very abundant. One of the finest.

**S. japonica**—A species from Japan, becoming a good-sized tree. Foliage dark green, flossy, leathery; flowers creamy white, odorless, in great panicles. A month later than other Lilacs.

**S. Josikea** (Hungarian Lilac)—A fine, distinct species, of tree-like growth, with dark, shining leaves and purple flowers in June, after the other Lilacs have done flowering.

**S. persica** (Persian Lilac)—From 4 to 6 feet high, with small foliage and bright purple flowers.

**S. persica var. alba**—Similar to *S. persica* but with white flowers.

**S. persica var. laciniata** (Cut-Leaved Persian)—Dwarfer and slower in growth than *S. persica*. Leaves deeply cut. Blooms pale lilac in May and June.

**S. persica var. rosea**—The pink-flowered *S. persica*.

**S. villosa**—A species from Japan. Large branching panicles; flowers light purple in bud, white when open; fragrant. Especially valuable, as its flowers appear two weeks after those of other Lilacs.

**S. villosa var. rosea**—The Japanese lilac with flowers of a light rosy-pink.

## Single-Flowered Varieties

**S. vulgaris** (Common Lilac)—Bluish-purple flowers. A standard variety. Always good.

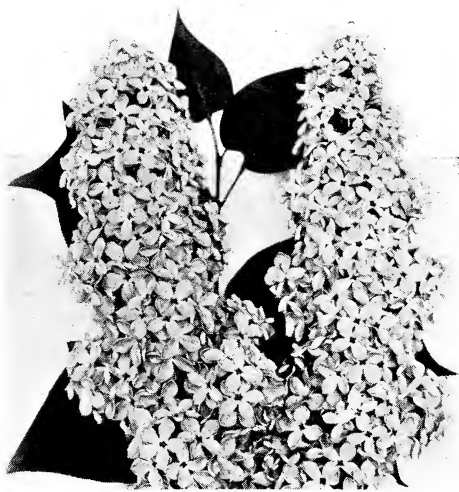
**S. Var. alba** (Common White Lilac)—Cream-colored flowers.

**S. Var. cerulea** (Common Lilac)—Single blue flowers.

**S. Var. purpurea** (Common Lilac)—Single. Purple to red.

**S. Var. Aline Mocqueris**—Single red flowers.

**S. Var. Charles X.**—A strong, rapid-growing variety, with large, shining leaves; trusses large, rather loose reddish purple.



SYRINGA (LILAC)  
"Ludwig Spaeth"

**S. Var. Congo**—Flowers large, wine-red. Very valuable.

**S. Var. Ludwig Spaeth**—Panicle long; individual flowers large, single; dark purplish red; distinct; superb.

**S. Var. Marie Legeray**—Large panicles of white flowers. Valuable for forcing. One of the finest white Lilacs.

**S. Var. Rubra de Morley**—Single light red.

**S. Var. Volcan**—Flowers large, ruby red.

## Double-Flowered Varieties

**S. Var. A'fonse LeValle**—Double flowers of bluish lilac.

**S. Var. Belle de Nancy**—Flowers double pink with white center.

**S. Var. Chas. Joly**—Flowers double, of dark purplish red.

**S. Var. Michael Buchner**—Flowers double, of pale lilac.

**S. Var. President Grevy**—Flowers double, of dark blue.

## TAMARIX

The Tamarisks are hardy shrubs of strong but slender, upright, spreading growth. Their foliage is as light and feathery as asparagus, and they are valuable for planting near the seaside.

**T. africana** (*T. parviflora*)—Bright pink flowers in slender racemes in April and May. Shrub is 15 feet tall and is very showy with its reddish bark.

**T. chinensis**—Flowers pink, in large, loose, usually nodding panicles; often 15 feet high.

## SHRUBS (Continued)



**VIBURNUM OPULUS STERILE**  
(COMMON SNOWBALL)

## TAMARIX (continued)

- T. gallica**—Delicate pink or white flowers in slender-panicked racemes in spring or early summer; leaves bluish green. Grows to 15 feet high.
- T. gallica indica**—Pink flowers in longer, more wand-like sprays. Foliage in dull green.

## VIBURNUM—Arrow Wood

The Viburnums are our most useful shrubs, being hardy, of good habit, bearing handsome flowers in summer, followed with showy fruit.

- V. acerifolium** (Maple-Leaved Viburnum)—Foliage resembles the red maple. Flowers yellow-white, showy, in flat heads. Fruit almost black. Blooms May. Good for low places or under trees.
- V. a'nifolium** (Hobble Bush)—A wide-spreading shrub with wide rough leaves, often more than 6 inches across. Flowers white, borne in flat heads about 4 inches across. Fruit dark purple, showy.
- V. cassinoides**—Cymes of white flowers in June. Black berries in autumn. Handsome foliage.
- V. dentatum** (Dentated-Leaved Viburnum, Arrow Wood)—Flowers greenish white. One of the best shrubs for massing for foliage effect.
- V. Lantana** (Early White Lantana-Leaved Viburnum, Wayfaring Tree)—A large, robust shrub, with soft, heavy leaves and large clusters of

white flowers in May, succeeded with red fruit; retains its foliage very late.

- V. Lentago** (Sheepberry)—Flowers creamy white, very fragrant; foliage a light glossy green.
- V. molle**—A robust-growing shrub, with cymes of white flowers, which appear later than those of the other Viburnums.
- V. opulus** (High Bush Cranberry)—Both ornamental and useful. Its red berries, resembling cranberries, esteemed by many, hang until destroyed by frost late in the fall.
- V. opulus sterile** (Guelder Rose, Common Snowball)—A well-known, favorite shrub, of large size, with globular clusters of pure white sterile flowers the latter part of May.
- V. prunifolium** (Plum-Leaved Viburnum, Black Haw)—Has smooth, glossy foliage and white flowers in May and June.
- V. Sieboldii**—Large, long, thick leaves of a glossy green color.
- V. tomentosum**—The single form of the beautiful Japan Snowball, Viburnum Plicatum; flowers pure white, borne along the branches in flat cymes, in the greatest profusion, early in June. Perfectly hardy, vigorous and free-blooming. Very desirable.
- V. tomentosum plicatum** (Plaited-Leaved Viburnum, Japan Snowball)—From North China, of moderate growth; handsome plicated leaves, globular heads of pure white neutral flowers early in June. It surpasses the Common Snowball in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. One of the most valuable flowering shrubs.

EXTRAORDINARY NEW  
VIBURNUMS

- V. Carlesii**—An early-flowering Viburnum of fine habit, bearing deliciously fragrant white flowers in May, being one of the first shrubs to flower. We consider this one of the most important introductions of recent years.

## WEIGELA

(See Diervilla)

## XANTHOCERAS

- X. sorbifolia**—A rare, very ornamental upright shrub, with long pinnate foliage, dark green above and pale beneath. Flowers bell-shaped in loose, upright clusters about 3 inches across and 5 to 6 inches long. Flowers yellow-white. Blooms in May.

## ZANTHOXYLUM

- Z. piperitum (americanum)** (Prickly Ash)—Valuable in landscape work, chiefly because of foliage and ornamental fruits.

## CLIMBING VINES

Vines are the little frills of Nature's dress. They enable us to embellish barren walls and fences, to accentuate the beauty of classic columns of the porch or pergola, and to drape rockeries, banks and trellises. Their graceful foliage and beautiful flowers hide the displeasing views and lend an air of home-like charm that can be secured in no other way. Climbing Roses are useful and very beautiful on arbors and trellises.



**LONICERA HALLEANA  
(HALL'S JAPAN HONEYSUCKLE)**

## CLIMBING VINES (Continued)



**ARISTOLOCHIA SIPHO**  
(DUTCHMAN'S PIPE)

## AKEBIA

- A. quinata**—A beautiful, hardy Japanese vine with unique foliage and chocolate-purple flowers of delightful fragrance in large clusters. The foliage is never attacked by insects.

## AMPELOPSIS

- A. quinquefolia** (American Ivy or Virginia Creeper) — Rich crimson in autumn; a very rapid grower. One of the finest vines for covering walls, verandas, trunks of trees; affords shade quickly.

- A. quinquefolia Englemannii**—A splendid climber, grows 6 to 10 feet in a season. This variety has become very popular on account of its ability to cling to walls, etc., without wire trellis.

- A. tricuspidata Veitchii** (Japan Ivy)—A beautiful hardy Japanese species. One of the finest climbers for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to bright shades of crimson and yellow in autumn. When once established it is quite hardy. Give some protection the first year.

- A. tricuspidata Lowii** — Beautifully cut leaves, apple green turn in autumn to bright red hues. The young growths cling closely and give a very lacy effect. Has a peculiarity of not clogging the gutter, hangs over in the form of a shower of young growths, which give a splendid effect.

## ARISTOLOCHIA

- A. Sipho** (Dutchman's Pipe)—A magnificent hardy vine of rapid growth, with very large heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe. Splendid for archways or verandas, as it is a very rapid grower and forms a dense shade.

## CELASTRUS

- C. scandens** (Bittersweet) — A native climber with handsome, glossy foliage and large clusters of beautiful orange-crimson fruits, retained all winter. Very bright in effect and its graceful sprays of berries are charming for winter house decoration.

- C. orbiculatus** (Japanese Bittersweet)—A climbing shrub of vigorous growth. Fruits profusely but are not conspicuous until the leaves have fallen.

## CLEMATIS

Of all the vines used either for shade or decoration, none can compare with the Clematis in its many varied forms. While the large-flowered kinds are not so good for shade until they attain considerable age their wealth of bloom makes them the grandest embellishments to the porch known. Of the small-flowered varieties, *Paniculata* undoubtedly holds the lead either as a shade producer or for its abundance of bloom. It is a rampant grower in good soil, and the lateness of its bloom, coupled with the exquisite perfume of its flowers, makes it one of the most desirable of all vines.

## CLIMBING VINES (Continued)

## CLEMATIS (continued)

- C. cerulea** (Common Blue Clematis)—Very fragrant. Flowers reddish, violet blue. Blooms July to September. Should be grown on northern exposure to preserve color of flowers.
- C. coccinea**—Very handsome, bearing small thick bell-shaped flowers of bright coral red in profusion from June until frost.
- C. Duchess of Edinburgh**—Fine white double flowers.
- C. Henryi**—Very large, fine form; free grower and bloomer; creamy white.
- C. Jackmannii**—Large, intense violet purple; remarkable for its velvety richness; free in growth and an abundant and successive bloomer.
- C. Madam Koster**—Large red, very fine. Best of the red-flowering.
- C. Madam Edouard Andre**—Has been called the Crimson Jackmanni. The plant is a strong, vigorous grower and very free in bloom. Color, a distinct crimson-red. Entirely distinct from all other varieties.
- C. Ramona**—Large flowers of deep sky blue.
- C. Ville de Lyon**—Very large flowers of bright carmine—nearly red.
- C. paniculata** (Sweet-Scented Japan Clematis)—A Japanese plant possessing unusually attractive merit. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets and of a most delicious fragrance. The flowers appear in September at a season when very few other vines are in bloom.

## DIOSCOREA—Cinnamon Vine

- D. Divaricata**—The odd and quaint Cinnamon Vine, most conspicuous in fall when small tubers cluster in the axils of its dark, glossy, arrow-shaped leaves. The white flowers are small but fill the air with a delightful cinnamon odor. The beautiful cinnamon vine is one of the most charming of climbers and will quickly cover an arbor, window or veranda with a great profusion of vines and sweet-scented flowers, making it a perfect bower of beauty. The vine is a hardy perennial and once planted will grow for many years and will be a source of constant delight to the possessor. There is nothing which will give a home a more homelike and cozy appearance or be a surer index of refinement and culture



CLEMATIS PANICULATA

than beautiful vines twining about the porch and trellises.

## DOLICHOS—Kudzu Vine

- Dolichos thunbergiana** (Japanese Kudzu Vine)—An extremely rapid growing vine, especially desirable for quick effects and useful for hiding unsightly objects. The leaves are large and handsome.

## EUONYMUS

- E. radicans**—An evergreen vine; clings to walls after the manner of Ivy. Beautiful.
- E. radicans Var. Variegata**—A variety of the above with variegated leaves.
- E. radicans Vegeta**—This variety has beautiful glossy green leaves that are broader than other varieties.

## HEDERA

- H. helix**—The well-known English Ivy, still the most beautiful covering that can be given to any rough wall or surface. Leaves of rich green. Should be planted on the eastern or northern side of buildings.

## CLIMBING VINES (Continued)

## LONICERA—Honeysuckle

*L. japonica brachypoda aurea reticulata* (Japan Golden-Leaved Honeysuckle) — A handsome and very desirable variety, with the foliage beautifully netted or variegated with yellow.

*L. japonica Halleana* (Hall's Japan Honeysuckle) — A strong, vigorous, almost evergreen sort with pure white flowers, changing to yellow. Very fragrant and covered with flowers from July to December; holds its leaves till January. The best bloomer of all.

*L. sempervirens* (Scarlet Trumpet Honeysuckle) — A strong, rapid grower and produces scarlet inodorous flowers.

*L. Periclymenum belgica* (Belgian Honeysuckle) — Foliage light green. Flowers showy and fragrant. Good climber. Bloom red-yellow in June and September.

## LYCIUM

*L. ha'imifolium* (Matrimony Vine) — Sometimes trained as a shrub. Purple flowers and showy fruited. Extra vigorous in growth.

## TECOMA—Bignonia, Trumpet Flower

*T. Bignonia radicans* (American Climbing Trumpet Creeper) — A splendid,

hardy, climbing plant, with large, trumpet-shaped scarlet flowers in August.

## VINCA—Periwinkle

*Vinca minor* (Myrtle or Periwinkle) — A familiar evergreen creeper bearing blue flowers in early spring.

## VITIS AESTIVALIS

*Vitis aestivalis* (Pigeon Grape) — A strong, tall-climbing vine of the native or wild grapes. A marked type readily distinguished from other species by the reddish fuzz of the under side of the leaves.

## WISTARIA

*W. sinensis* (Chinese Wistaria) — One of the most elegant and rapid growing of all climbing plants; attains an immense size, growing at the rate of 15 to 20 feet in a season. Has long pendulous clusters of pale blue flowers in May and June and in autumn.

*W. sinensis* Var. *Alba* (Chinese White Wistaria) — Pure white flowers, beautiful.

*W. Var. frutescens magnifica* — Strong climber. Flowers lilac-purple borne in racemes from 4 to 6 inches long.

Five years ago I set out quite a few Steele's Red and Winter Banana apple trees and now wish to say they are doing fine. I had 6 Steele's Red bearing from 2 to 15 apples, 5 years from date of planting.—John H. Dreffein, Oak Park, Ill.

I have delivered all orders and have just as many pleased customers. Stock was in fine condition.—J. W. Foor, Mendon, Ohio.

I received the strawberry plants all O. K. and they were in fine shape.—Clinton Hyke, Northville, Mich.

Some time ago I purchased some shrubbery from your agent and I want to take this occasion to tell you that it is coming along fine and I am well pleased with it.—Jos. Reinlein, Toledo, Ohio.

My orchard is all Greening's trees and one of the best in the country, therefore you can appreciate my reason for keeping it up and getting good stock for replacement.—Louis F. Eckard, Newaygo, Mich.

The shrubbery furnished me spring of 1919 is doing fine. It was all nice live stock and is growing beautifully.—E. A. Heaton, Maumee, Ohio.

I received my shipment of trees and they arrived in fine condition.—Cecil Rynbrandt, Dorr, Mich.



The love of roses is innate in man. With delicate perfume, and soft rich tints of red, white, pink and yellow, with fragrant velvety petals with great profusion of bloom and generally vigorous growth, the rose has remained in popular favor for centuries. The success of the rose is largely a matter of how the

bushes are grown. Bushes grown in pots in greenhouses are marketable in a few months from cutting, and the soft-forced growth is not hardy enough to withstand outdoor conditions. These "bargain counter" roses have been a source of much discouragement to planters who are slow in finding out that cheapness does not consist in what you pay, but what you get for what you pay. There is also a great deal of unjust clamor against budded roses. The facts are that few roses strike roots on their own wood, and fewer still have enough vigor to become good bloomers when grown that way. With few exceptions, budded roses are by far the best, requiring only deep planting to prevent the growth of suckers and the careful cutting out of those that may appear. The best stock to use

here is that used in Continental Europe—the Manetti and Rosa Rugosa rose stock. The Greening Nursery Company imports its rose seedlings from France and Holland. These are lined out in the nursery, budded the same year and marketed the year after, making virtually three-year plants; that is to say, they grow one year in Europe, and two years in our nursery—quite different from the little slips grown in 2½-inch pots forced with bottom heat in the greenhouse and sold in a few months from the time of making the cutting.





## ROSES

### PLANTING

All budded roses should be planted about four inches deeper than the junction of the bud. All suckers growing out of the ground should be removed as soon as seen. Where this is neglected the natural stock will smother the grafted part in a very short time.

### PRUNING

This operation is best performed during March. Most roses do better if moderately pruned; some sorts require two-thirds of the past year's growth removed; for others, to remove one-half or one-third is sufficient. All must be more or less pruned when planted—do not neglect this. As a general rule, the more vigorous the variety the less it should be pruned. All weak or decayed wood should be entirely cut out and also any shoots that crowd the plant and prevent free entrance of light and air. Besides spring pruning, many kinds of Hybrid Perpetuals require to be headed back as soon as their first blossoming is over in order to induce a free display of flowers in autumn.

### PROTECTION

All the Hybrid Tea and most of the other classes need protection if left out during the winter in this and similar climates; indeed, all roses would be better for a light covering. This may be done by hilling up with earth, or better by strewing leaves or straw lightly over the plants and securing them with evergreen branches; oftentimes the latter are in themselves sufficient.

### SPRAYING ROSES

Of the various insects which attack plant life there are two distinct classes—the “chewing” kind and the “sucking” kind. The chewing insects, such as beetles, worms and caterpillars, can be destroyed by spraying the foliage with a stomach poison like Arsenate of Lead, which kills when it is eaten. But the “sucking” insects—aphides (plant lice), thrips and leaf hoppers—feed by inserting their sharp, slender beaks into the interior of the leaf, blossom or stem. They cannot eat plant tissue and therefore cannot eat poisons. The only way they can be destroyed is by a preparation which kills when it comes in contact with their bodies; in other words, by a “contact” insecticide. The most effective contact insecticides from the standpoint of killing power and safety to foliage are nicotine solutions. To best apply the “contact insecticide,” dipping is recommended. Take a shallow pan filled with the nicotine solution and bend the rose branches over into it holding them there for 10 or 15 seconds. Dipping is considered much more effective than the use of the spray.

We recommend a couple of the best preparations:

**“NIKOTIANA”**—This mixture is made and sold by the Aphine Manufacturing Company, of Madison, N. J. The manufacturers give the following directions for its use: “Use one ounce (two tablespoonsful) of ‘Nikotiana’ to two gallons of water. Add one-half ounce of soap (whale or fish oil soap preferred) to each gallon of water. A solution of this strength will prove effective for rose insects.”

**“BLACK LEAF 40”**—A copyrighted tobacco mixture made and sold by the Kentucky Tobacco Product Company, of Louisville, Ky. One ounce of “Black Leaf 40” will make six gallons of spray mixture and will prove quite satisfactory, as shown by experiments of our own.

**ARSENATE OF LEAD AND PARIS GREEN**—In using Arsenate of Lead or Paris Green as a remedy for chewing insects such as beetles, green rose worms, caterpillars, etc. the following percentages are recommended:

**Arsenate of Lead**—Use one-quarter pound of the Arsenate to 5 or 6 gallons of water.

**Paris Green (Pure)**—Use one-half ounce to 5 gallons of water.

In case only a few plants are to be treated, it is not absolutely necessary to have a sprayer or atomizer. The mixture can be shaken on with a whisk broom, or as stated above, by dipping the branches right into a shallow pan containing the solution.

Either of the materials that we have mentioned will be found cheap and practical. A small atomizer will cost 50 cents to \$1.00.



## HYBRID PERPETUAL ROSES

As the name implies, the Hybrid Perpetual Roses are the result of hybridizing. Many new varieties are produced each year. The Hybrid Perpetuals have no rivals and are here given first because of their hardiness and because as a group they are the largest, best known and of the easiest culture. The Hybrid Perpetual Roses can be grown in any warm, sunny spot, sheltered from strong winds, if the soil is a deep, rich loam. A clayey soil is preferable and as the rose is a gross feeder, an occasional top-dressing of well-rotted manure is beneficial. It is very important in planting roses to set them deeply. After planting the top should be cut off within 3 or 4 inches of the ground. Each year, in the early spring, they should be cut back to within 6 or 8 inches of the ground. Set sufficiently deep, they do not winter kill. The list given comprises the best varieties. Those marked \* are the most persistent bloomers.

**\*Alfred Co'omb**—Brilliant carmine-crimson, very large, full and of fine globular form. Very fragrant.

**American Beauty**—More widely known than any other rose. Color deep pink to carmine cerise. Delightfully fragrant. Valuable for cutting.

**Anne de Diesbach**—Very fragrant, of a brilliant carmine, blooming over a long period and one of the most serviceable roses. Buds long and pointed. Flowers large and double when fully opened.

**Baron de Bonstettini**—A dark, velvety crimson rose of delightful fragrance. Flowers large and full. A necessity in every collection.

**Baroness Rothschild**—Of delicate pink, this popular rose pleases all. Flowers large, symmetrical and cupped in shape. Free bloomer.

**B'ack Prince**—A very dark crimson rose of distinctive beauty.

**Captain Hayward**—A strikingly bright scarlet rose of unique formation. The center petals stand upright while the outer ones are reflexed. The flowers are large and appear frequently during the season. Very fragrant. Exceptionally hardy and vigorous.

**Clio**—A satiny, flesh-colored rose with pink center. Fragrance mild and sweet. The Clio is a beauty in all stages of bud and flower.

**\*Coquette des Blanchés**—A snowy-pink rose which blooms in large clusters. Flowers medium size, full and slightly fragrant.

**\*Coquette des Alps**—A beautiful white rose shaded with pink. An unusually free bloomer.

**Duke of Edinburg**—Blooms early and the flowers are of a cheerful vermilion, shaded with scarlet. Blooms large and fragrant.

**Earl of Dufferin**—A rich, velvety crimson, shaded with dark maroon. Beautifully shaped buds borne on long, graceful stems. Very full and double. Free bloomer. Delightfully fragrant. One of the best dark reds.



ANNE DE DIESBACH

**Eugene Fuerst**—A velvety crimson sort that has no superior. This rose should be included in every collection, no matter how limited the selection.

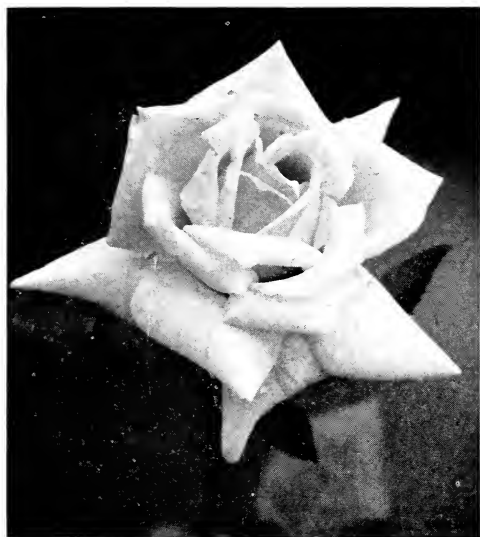
**Fisher Holmes**—An exceedingly sweet-scented rose of bright velvety crimson or scarlet. Of more than usual beauty in both bud and flower. Considered one of the choicest.

**\*Frau Karl Druschki**—The finest of white Hybrid Perpetuals. Known by some as the Snow Queen, its billowy white blossoms prove that name well taken. Very fragrant. It never disappoints.

**George Arends**—This is the pink form of Frau Karl Druschki. Of good, vigorous growth. Flowers bright pink, flowering singly on the point of each shoot.

**General Jacquiminot**—Everybody who loves roses places this sort high in the list of extra desirable kinds. Of bright crimson and sweet fragrance it is assured a place in every worth-while collection.

## HYBRID PERPETUAL ROSES (Continued)

**KAISERIN AUGUSTA VICTORIA (H. T.)**

**Glorie de Chedane Guinoisseau**—A new red rose of full, perfect shape. Flowers brilliant vermilion shaded velvety red.

**Gloire de Lyonnaise**—A creamy white passing to salmon yellow, borne on long stems. The buds are beautifully pointed and satisfy every demand.

**Her Majesty**—Dark crimson shaded to vermilion edge. Pleases all who grow it.

**\*Hugh Dickson**—This rose is a free and constant bloomer, bearing its beautiful crimson and scarlet flowers on long stems. Of a sweet and gentle fragrance all its own.

**\*John Hopper**—A rose of medium size with a keen but pleasing fragrance. The color blends from a rosy pink to a carmine.

**Jubilee**—This rose has been awarded a medal as one of the best shown in fifty years. It varies in color from a flashing red to crimson. Free bloomer of fragrant flowers. Valuable.

**Louis Van Houtte**—Color red to crimson, but the hues blend with such fitness that it is a distinctive sort which can't well be described. Very fragrant and desirable.

**Mme. Chas. Wood**—A fiery scarlet passing to rosy crimson with a maroon shade. Fragrance delightfully sweet. Blossoms freely.

**Mme. Gabriel Luizet**—A silvery pink rose of mild fragrance, large full blooms, unique in shape and color.

**Mme. Plantier**—A white rose of extreme beauty. Free bloomer, hardy and valuable everywhere, especially for cemeteries, hedges and planting in masses.

**Magna Charta**—A rosy pink, full rounded, globular rose of marked fragrance. Profuse bloomer. Valuable for cutting. Used extensively by florists for cut flowers.

**Margaret Dickson**—An actual prize-winner is this white sort with rosy, flesh-colored center. If only half a dozen roses are bought, this variety should be included.

**Marshall P. Wilder**—Bright scarlet-crimson in color, flowers full, round and extra large. Very fragrant. Desirable in any collection.

**\*Mrs. John Laing**—Softest and sweetest of pink is this rose. Very fragrant, too, and the blooms, large and double, borne on long stems. Free bloomer.

**Mrs. R. G. Sharman Crawford**—Received the Gold Medal for merit of the National Rose Society and if you know this rose you will agree it was most worthily bestowed. Of deep rosy pink blooms large and perfect with delightful fragrance.

**\*Paul Neyron**—The largest flowered rose, blooming freely of a clear pink shading to rose. Fragrant, beautiful and massive. Considered one of the six best roses for outdoor planting.

**Prince Camille de Rohan**—One of the darkest roses, blood-red and maroon. Fragrant and wholly delightful. A favorite in all collections.

**Sir Rowland Hill**—A dark velvety rose of great beauty and fragrance. Very popular and should be because of its great merit.

**Ulrich Brunner**—Of a lively, pleasing, light distinctive red all its own. Flowers borne on long stems. Very fragrant, full and graceful. One of the most popular.

I am more than pleased with my trees; although they laid on the railroad so long (a little over 4 weeks) I have not lost a single tree. I expect to send you an order for more trees next spring.—  
Glenn O. Sholl, Hicksville, Ohio.



Any home-owner who loves flowers can arrange to have an arbor equally effective as the one shown above. The rose is the new Climbing American Beauty, but any one of the climbers or ramblers may be used if they are preferred.

## HYBRID TEA ROSES

The Hybrid Teas rank next in importance to the Hybrid Perpetuals as a class or group and are the result of crossing the Hybrid Perpetuals with the Tea Roses. The Hybrid Teas are the freest and most continuous flowering of all the roses. They are valued because of their delightful fragrance and constant blooming. While they are comparatively tender, they can be safely wintered if covered carefully as per the instructions given on care of Roses in this book.

**Antoine Rivoire**—Large, double, finely formed flowers; rosy flesh over yellow, bordered with carmine. Fragrance sweet. Free bloomer. Foliage resists mildew.

**Betty**—A coppery rose overspread with golden yellow. Perfume as pleasing as its colors. Both bud and flower beautiful. A constant bloomer.

**Caroline Testout**—A satiny rose in color, of sweet perfume and of marvelous beauty. Very popular.

**Chateau de Clos Vougeat**—An ideal rose of dazzling color, being a rich scarlet, shaded fiery red, changing to dark velvety crimson as the flowers expand; as dark but richer in color than the popular Hybrid Perpetual Prince Camille de Rohan. Continuous bloomer.

**Dean Hole**—Color silvery carmine shading to salmon. Fragrance delicate and pleasing. Flowers large, full and of

perfect form. Beautiful in bud and valuable for cutting.

**Dorothy Page Roberts**—A coppery-pink suffused with apricot yellow. Valuable and striking in any collection.

**Ecarlate**—Blooms more profusely than any other Hybrid Tea. Flowers of intense brilliant scarlet and of perfect form. Continuous bloomer.

**Etoile de France**—Of clear red to velvety crimson. Flowers borne on long stems. One of the most charming of the red roses.

**Farben Koenigen**—Of bright carmine and rosy crimson overlaid with a satiny silver sheen. One of the finest roses; beautiful in bud and full flower.

**General McArthur**—A brilliant, glowing crimson-scarlet. Very sweet scented.

**General Superior A. Janssen**—A glowing, deep carmine-red; large, full, fragrant and continuous bloom, coupled with vigorous and compact growth.

**George Dickson**—Color velvety scarlet-crimson, with brilliant scarlet reflexed tips. Of globular shape, five inches in diameter.

**Gruss en Teplitz**—Of intense and dazzling crimson-scarlet that attracts attention in any garden. Fragrance delicious and lasting—both odor and color appeal to all.

## HYBRID TEA ROSES (Continued)



KILLARNEY PINK (H. T.)

**J. B. Clark**—A great, massive burst of deep scarlet shading to blackish crimson and maroon. Flowers, too, are borne on long stems making it invaluable for cutting.

**Johnkeer J. L. Mock**—This rose won the grand prize at the International Rose Show held in Paris in 1911. Of lovely imperial pink, the flowers are large, produced freely and are highly perfumed.

**Kaiserin Augusta Victoria**—In color, a pale and lovely primrose. Especially desirable for cutting by reason of long stems, beauty of bud and flower. Considered by many to be the greatest creamy white Hybrid Tea.

**Killarney Pink**—Bloom of flesh-color suffused with pale pink in a delightful blend. Very fragrant and blooms grow naturally on long stems, making it valuable for cutting. This is easily one of the best half-dozen roses.

**Killarney White**—Similar to Killarney Pink but the color of flower is white.

**La Detroit**—A most handsome and dainty rose, with a fragrance like Bon Silene and color of shell-pink, shading to a soft rose; outer petals of creamy color.

**Lady Alice Stanley**—Shell-shaped petals of deep coral rose outside, interior delicate flesh suffused pink. A persistent and free bloomer.

**Lady Ashtown**—Tender rose shading to yellow at base of petals with silvery pink reflex.

**Lady Hillingdon**—The color of this famous rose is beyond description. It is apricot-yellow shaded to orange on the outer edge of the petals, becoming deeper and more intense toward the center of the bloom. Buds produced on long stems well above the foliage, producing a slender and graceful effect. A very valuable rose.

**La France**—Whatever else one may plant in the way of roses, however much the grower may be enamored by other varieties, the garden should contain the La France to be complete. Or, where only a few roses are to be grown, this one should find a place. It is silvery rose in color with a sweet fragrance, and the flowers come freely and constantly. The blossoms are large, full and globular, and of that graceful decided rose-form that is so much to be desired in a permanent asset of the garden. The plant is of moderate growth and compact, the canes being strong and woody—in short, a plant that is of the right type to produce the very finest flowers for the garden or for cutting. Really indispensable and after many years of successful competition with rivals of many hues, still retains its popularity.

**Laurent Carle**—Produces large, deliciously scented, brilliant carmine flowers throughout the season nearly as good in hot, dry weather as under more favorable weather conditions. Very hardy.

**Lieutenant Chaure**—The rich color, the brilliant velvety crimson-red and its beautiful long buds, together with its vigorous growth and prolific habit of flowering, makes this one of the most desirable of the high-colored sorts.

**Los Angeles**—Never in the history of the rose-world has a new rose created such a sensation as the Los Angeles. It is absolutely the finest all-round rose ever introduced and must be seen to be appreciated. The stems are as long as the American Beauty, the flowers are large as the Paul Neyron, its freedom of bloom and continuance in flower are remarkable and its color—"a flame pink, toned with coral and shaded with translucent gold" at the base of the petals. If selection be limited to one rose, this is the one to select.

## HYBRID TEA ROSES (Continued)

**Mme. Abel Chatenay**—This rose is especially recommended for cultivation in the South, where it attains great perfection. The blossoms are carmine-rose shaded with salmon and have a mild fragrance. They are freely produced, full and deep, the petals being handsomely curled. There is no rose exactly like it in the brilliancy of its color, and when well grown the hues rival those of the most gorgeous sunset—a beauty enhanced by the silvery or satin finish of the petals. The bush grows strong and erect. Should be planted in connection with other roses; at least, it seems to blend with other roses in such manner as to make its colorings all the more conspicuous.

**Mad. Ravary**—A golden-yellow favorite variety beautiful in both bud and flower at all stages. Fragrant and delightful.

**Miss Cynthia Forde**—Very full flowers; deep rose-pink, shading on back of petals to light pink.

**Mrs. Aaron Ward**—Deeply cupped buds which when open produce a delightfully attractive deep golden orange flower shading outward to creamy yellow.

**Mrs. Wakefield C. Miller**—A most attractive color combination in large, free flowers with wavy edges, soft pearl shaded salmon with rosy reverse.

**My Maryland**—A bright but tender salmon-pink; delightfully fragrant. Flowers double and of perfect form. Profuse bloomer.

**Ophelia**—One of the most beautiful of the newer introductions. Excellent for cutting, its perfect flowers of distinct form emitting an exquisite fragrance. Color salmon-flesh shaded with rose.

**Pharisaer**—Long, shapely buds opening out wide and full. Great beauty of form and charming combination of salmon, rose and white in color.

**Radiance**—This rose blends its colors of carmine-rose with shades of opal and copper. Wholly delightful.



J. B. CLARK (H. T.)

**Rhea Reid**—A beautiful rose of scarlet crimson that never disappoints either in bud or full bloom.

**Richmond**—One of the most gorgeous roses. In form and fragrance of flower it is simply superb. Wonderfully free blooming, its immense, fragrant, scarlet-crimson flowers are borne on long, stiff stems, making it a rival of American Beauty and even more dazzling in appearance. Considered the standard deep crimson rose in the florist's shop, selling at all times for high prices. In the garden its flowers are as fine as those found in the green-houses.

**Sunburst**—A magnificent giant yellow forcing rose, also well adapted for outdoor growing, being a vigorous and healthy rose. Buds long and pointed, borne singly on long stout stems, opening full and double. An excellent cut flower variety having excellent keeping qualities. A very vigorous grower, reddish bronze foliage. The color is a superb orange copper or golden orange, with a deep orange center. This rose creates a sensation wherever grown.

My trees which I bought three years ago from you have bore a few peaches this season and they were very fine and am much pleased with them.—Thomas Humphrey, Andis, Ohio.

The nursery stock you sent me this spring is coming along fine.—Geo. L. Warren, Grand Rapids Mich.

Nursery stock received in due time. Everything satisfactory as far as shipment is concerned.—P. J. Welch, Lake Odessa, Mich.



## PERNETIANA ROSES

All productions of the great French rose-grower, M. Pernet. They are hardy with ornamental tinted foliage.

**Lyon Rose**—Flowers pink-red with shades of coral, salmon and chrome-yellow. The fragrance is delightful. A profuse and constant bloomer.

**Mad. Edouard Herriot**—Flowers medium sized, semi-double, in a glorious commingling of terra-cotta, bronze, geranium red and dull copper; buds fine, long, pointed, of coral-red and yellow. Foliage a bronze-green.

**Soliel d'Or**—Especially valuable because of its rare color—gold and orange-yellow, varying to ruddy gold suffused with nasturtium red. Commonly known as "Sun of Gold."

**Willowmere**—Flowers a rich shrimp pink shaded yellow at center and toning to cream pink at base of petals. The buds are beautiful, the flowers large and the foliage a lustrous green.



SOLIEL D'OR

## TEA ROSES

Introduced from China more than a century ago. **Not hardy and require protection**, but they will repay all labor as they are free bloomers, very fragrant and the beauty of bud and flower beyond compare.

**Duchesse de Brabant**—Color, soft rosy pink deepening to bright rose with modest fragrance and shapely formation. The buds are especially beautiful and bloom large and double.

**Etoile de Lyon**—The flowers are very deep and full and double with a sweet odor. Color a rich golden yellow. Very beautiful in bud.

**Helen Gould**—A delicate pink in center, charmingly graduated to a darker pink at the edges with a fragrance deliciously sweet. Buds pointed and large, flowers double, large and full.

**Mme. Francisca Kruger**—One of the favorite yellow Teas. Flowers are large, coppery-yellow shaded with peach. Fragrance sweet. Preferred by many to any other yellow rose.

**Maman Cochet**—This flower presents shades of pink and rosy crimson which change to silvery rose and possesses a marked fragrance. Pointed buds which open into extra large double flowers. One of the most desirable Teas.

**Marie Van Houtte**—An excellent rose of pale canary yellow, passing to rich creamy white generally shaded with pale rose. Very sweetly scented. No rose can quite take the place of this great favorite.

**Papa Gontier**—The color a cherry-red, changing to a glowing crimson, and the blooms exhale a sweet mild fragrance. Exquisite and beautiful.

**Perle des Jardins**—An old-time favorite, the blooms of which are a deep golden yellow with a rich fragrance. This rose possesses an individuality unsurpassed by no other yellow and is ideal for cutting.

**White Maman Cochet**—One of the daintiest of the white roses. The blossoms are sometimes tinged with a pale blush which accentuates their purity. The fragrance is as dainty as its blossoms. Many claim it is the best of all the white roses for garden culture.



## BRIAR AND PENZANCE ROSES

All of this group are absolutely hardy. The leaves are delicately scented and are resistant to insects and unfavorable climatic conditions. All possess a dainty grace and beauty of bloom. Flowers are borne in greatest profusion.

**Amy Robsart**—One of the best of this group, with fragrant foliage and flowers. Color a deep satiny, buds well formed, growth vigorous and bloom abundant.

**Austrian Copper**—Color a bright coppery red, the reverse of the petals being golden yellow; the flowers single, brilliant, beautiful and fragrant.

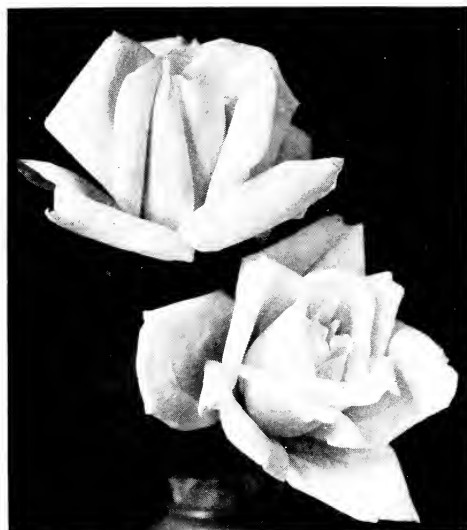
**Austrian Yellow**—Color a bright golden yellow. Delightfully fragrant. Single flowered, very large and attractive.

**Flora McIvor**—Color pure white suffused with a rosy pink. Pleasantly fragrant.

**Harrison's Yellow**—Flowers semi-double of medium size. Color, bright golden yellow. Fragrant. Hardy and desirable.

**Juliet**—A most distinct and attractive rose with large flowers. The outside of petals is old gold, the interior a rich rosy red changing to deep rose as the flowers expand; of delicious fragrance.

**Lady Penzance**—Very striking and unique. Color a soft copper with an odd metallic lustre. Both flowers and leaves are sweetly scented.



LADY HILLINGDON

**Lord Penzance**—Flowers fawn-colored, tinted and shaded with lemon. Delicately fragrant.

**Persian Yellow**—Blooms are of a deep, golden yellow, decidedly fragrant. Flowers large, fine, nearly double and of exquisite form. An old-time favorite which is still good.

## HARDY CLIMBING ROSES

### Including the Rambler and Prairie Rose Groups

Climbing roses are useful for covering arbors, walls, etc. They succeed best in deep, rich soils. They should be pruned severely immediately after flowering to induce strong growth and to guard against mildew, to which they are subject, particularly if they are exposed to the hot sun.

**American Pillar**—A single-flowered type of great beauty. Flowers 3 to 4 inches across, of a lovely pink with a clear white eye of yellow stamens.

**Aviator Bleriot**—A new yellow rambler whose foliage is insect and disease proof. Bears large clusters of medium sized full double flowers of saffron yellow deepening to an almost golden yellow at center.

**Baltimore Belle**—The flowers are fragrant and produced in a large cluster and are very double. Color pale blush to rose white. Vigorous and hardy. One of the finest climbing roses.

**Climbing American Beauty**—One of the best climbers. Color, a pleasing rose-pink of splendid form and good substance.

**Crimson Rambler**—This was the first of the ramblers introduced from Japan in 1894. Too well known to need a description; everyone is familiar with its large clusters of crimson flowers.

**Dr. W. Van Fleet**—This rose, because of its dainty color and exquisitely shaped buds and flowers, appeals to all. The long pointed buds are of flesh pink borne on stems 12 to 18 inches long. Splendid for cutting.

**Dorothy Perkins**—A clear cherry-pink of sweet fragrance. Always gives satisfaction because it is a rapid grower and always healthy. One of the very best climbers.

**Excelsa**—Color blood red, the tips of petals tinged with scarlet. Flowers double and foliage a dark glossy green.



CLIMBING ROSES OVER WELL

## HARDY CLIMBING ROSES (continued)

Commonly called "Red Dorothy Perkins."

**Flower of Fairfield**—Known to many as the everblooming crimson Rambler. It carries its bloom from spring even into November. Very desirable.

**Goldfinch**—The best yellow Rambler to date. Flowers large, semi-double, in full clusters of a rich lemon yellow.

**Hiawatha**—Very popular because it is really a pretty sort bearing its bloom in long trails of 40 to 50, which are a deep ruby crimson accentuated by a white eye. Foliage not subject to disease of any kind.

**Lady Gay**—The blossoms are a rich, delicate cherry-pink, shading to soft pink and delightfully sweet in odor. They are borne in large clusters and are very showy.

**Roserie**—This splendid new rose is a sport from the Tausendschoen and while showing exactly the same vigorous growth, clean foliage and freedom of bloom, its flowers are a deep glowing pink.

**Silver Moon**—Different from all other roses, with beautiful semi-double flowers four and one-half inches in diameter. Pure white in color, beautifully cupped; the large bunch of yellow stamens in the center adds to its attractiveness.

**Queen of the Prairie**—An old-time favorite. Blossoms of bright pink, sometimes with white stripes, and are very fragrant. A great bloomer and very hardy.

**Tausendschoen**—Distinctly different from any other rose and a very charming one, too. Color, soft pink changing to rosy carmine. Flowers profusely. Hardy. One of the best and merits its name of "Thousand Beauties."

**White Rambler**—Color pure white sometimes tinted with blush and produced in great profusion. In every respect a most satisfactory and pleasing climber.

**White Dorothy Perkins**—Similar to the pink form in every respect. Very fine.

The trees I received from you last spring are fine and are showing good growth. I would like to have you send me a price list on fruit trees for next spring.—Wm. Wahman, Romulus, Mich.



## POLYANTHA ROSES

### (Fairy or Baby Ramblers)

No class of roses is more popular than this. They are hardy, showy and compact growers. They hold their color well and continue in bloom through a long season. They are dwarf in habit, 18 to 24 inches in height and indispensable.

**Baby Rambler**—When in bloom the bush presents the appearance of an assembled bouquet except for a glimpse here and there of the deep glossy green leaves. Flowers crimson-red and slightly fragrant. For a rose-hedge it has no superior among all roses.

**Baby Dorothy**—In color similar to the climbing Dorothy Perkins and in every respect equal to the Baby Rambler above except the color of bloom, which is as beautiful a pink as can be imagined.

**Baby Tausendschoen**—Identical in color to the popular climbing Tausendschoen, a soft tender shade of pink, blooming throughout the season.

**Clothilde Soupert**—An ivory-white rose of peculiar charm. Center of flower a silvery rose, outer petals pearly white. Of delicate fragrance, carrying its bloom until the first freeze of winter.

**Echo**—A beautiful semi-double, blush white flowers produced in great abundance. Vigorous grower.

**Ellen Poulsen**—A very brilliant pink, large, full, sweet-scented; vigorous habit and free bloomer.

**Erna Teschendorf**—A sport from the Crimson Rambler, as bright as Gruss en Teplitz, which has been described as the reddest of all roses.

**George Elger**—A coppery golden-yellow in bud but a pale-yellow when fully opened.

**Jessie**—Of a bright cherry crimson which does not fade. Blooms constantly until killed by frost.

**Mad. Cutbush**—Clear flesh pink with shadings of rose. One of the best pink ramblers.



**PAUL NEYRON**  
(See under H. P. Roses)

**Orleans**—Geranium red with distinct center of pure white. Free bloomer; a great favorite.

**Pink Soupert**—The bloom is large, profuse, fragrant and handsome. Color, a cheerful, bright rose-color. Persistent bloomer and valued as a foreground for bolder varieties.

**White Baby Rambler**—Blossoms are pure white and have a rich fragrance. Can be used to good advantage in connection with either the crimson or pink varieties of this class.

**Yellow Soupert**—Blossoms of chrome-yellow, appearing freely in clusters. They are large and double and especially dainty in bud. A constant bloomer from early summer until freezing weather.

**Yvonne Rabier**—The best white Baby Rambler, with full double flowers produced in great profusion.

## WONDERFUL NEW ROSE OF THE POLYANTHA TYPE

Not Available for Marketing Until Spring, 1922

**F. J. Grootendorst**—Mr. F. J. Grootendorst has been our agent in Holland for many years. He is a skilled grower of nursery stock and the rose now offered which bears his name is the result of crossing a briar rose (*Rosa rugosa*) with the dwarf Rambler (Polyantha). It is needless to say that this union of stock produces an extremely hardy rose. It grows more vigorously than the Polyanthas, showing its *Rosa rugosa* blood in this as well as in the foliage, which is insect and disease proof. The flowers are borne in clusters—not many in the cluster—but each individual rose stands out full, clean and distinctive and the color is a decided deep red. The size of bloom, too, is double that of the ordinary Polyantha. In bloom constantly from early summer until winter. In all, a remarkable addition to the rose family and one which will demand a place in every garden.

## MOSS ROSES

Moss roses require a rich soil, and are attractive either in masses with shrubbery or as a background for Hybrid Perpetual roses in the rose garden. They should be pruned severely each year and kept low, but as the blooms are produced on the wood of the previous year's growth, pruning must not be done until immediately after flowering. The varieties mentioned are best of the very best. All are fragrant.

**Blanche Moreau**—A lovely large pure-white rose.

**Crested Moss**—As its name implies, it is crested with rich green shadowy moss. Color pale rose. The blooms are large, full and of exquisite form. Beautiful in bud and in full bloom.

**Henry Martin**—Color deep carmine, shaded with bright crimson. The buds



**GENERAL JACQUIMINOT**  
(Refer to Hybrid Perpetual Roses)

are especially well mossed and while not so well known as some of the other varieties, is a favorite when once seen.

**Salet**—A rosy pink. Both bud and blossom are fully crested with moss. Considered one of the most desirable of the Moss Roses.

## ROSA RUGOSA AND ITS HYBRIDS

This type is perfectly hardy and is much used in landscape work. Growth upright. Height about six feet. Very sturdy and very thorny. The leaves are a dark, lustrous green. These roses are not annoyed by insect pests. The flowers are followed by brilliant red fruit which gives this type a peculiar charm in late fall and early winter. Valuable for hedges and borders.

**Rosa rugosa alba**—The flowers of this rose are three inches across of rosy-carmine or white, borne singly or in terminal clusters. Leaves are a dark, lustrous green and wrinkled. Valuable for landscape work.

**Rosa rugosa rosea**—A rosy-pink of this variety similar in other respects to Rosa rugosa.

**Rosa rugosa rubra**—The red-colored form of Rosa rugosa.

**Blanche Double de Coubert**—A splendid double pure-white rose of this class. One of the best. Foliage deep green; not subject to blight.

**Conrad F. Meyer**—A Japanese variety of a lovely silvery rose, full double with a fragrance that is delicious. A rose of many virtues and surpassing beauty. Blooms freely all season.

**Hansa**—An attractive double reddish-violet rose of the Rugosa sort.

**Mme. Georges Bruant**—A pure white rose of rich and subtle fragrance. The buds are long and pointed and the flowers loosely double. Blooms all summer.

**Nova Zambla**—This beautiful rose is a sport from the Conrad F. Meyer but comes true every season. The flowers are pure white with a pleasant flush of pink and are richly scented. The blooms are large and double and produced in large quantities.

**Roseaie de l'Hay**—A new Hybrid Rugosa which we cannot speak too highly of. A good grower; flowers very double, of a carmine cherry red. Very fragrant.



BED OF WHITE BABY RAMBLERS

## ROSA WICHURAINA

A half evergreen shrub with prostrate creeping branches and glossy green foliage. Flowers single, fragrant and about two inches across in clusters. Good for covering banks and rockeries.

**Memorial Rose**—The best rose for covering unsightly objects. Its shining foliage and pure-white fragrant blossoms make it desirable for banks and rockeries.

## ROSA RUBIGNOSA

Grown more for its fragrance than its beauty. Dense growing. Ultimate height about six feet. Foliage exhales an agreeable odor. Flowers single, about 1½ inches in diameter and are borne in small clusters. Very hardy. The named varieties under Briar and Penzance Roses are hybrids of the *Rosa rubignosa*.

**Rosa rubignosa**—One of the sweet briar and are bright pink. Very valuable in landscape work.

## ROSA RUBRIFOLIA

Very valuable to secure color effect in landscape work. The leaves are blue-green, deeply tinged with purplish-red. The fruit is scarlet and add much to its attractiveness in early winter. A very hardy and unusual rose. A good substitute for purple barberry.

## ROSA SETIGERA

A beautiful shrub with long, slender, recurving branches. Grows to a height of about six feet. Flowers in great profusion. Valuable for massed plantings in landscape work.

## TREE ROSES

These are grown in tree form with bodies about three feet high. They are very profuse bloomers and highly ornamental and attractive. After transplanting the tops should be cut back to spurs about four inches long. They require very rich soil and should be well bundled up in the winter with straw and burlap or corn-stalks. In summer the stem should be wrapped with straw or heavy paper as a protection against the hot rays of the sun. None of this form will be available until the spring of 1922. At that time we can furnish the following:

Caroline Testout (H. T.)  
Clio (H. P.)  
Frau Karl Druschi (H. P.)  
General MacArthur (H. T.)  
Gruss en Teplitz (H. T.)  
General Jacqueminot (H. P.)  
Kaiserin Augusta Victoria (H. T.)

Lady Hillingdon (H. T.)  
Mad. Edouard Herriot (H. T.)  
Ophelia (H. T.)  
Paul Neyron (H. P.)  
Radiance (H. T.)  
Sunburst (H. T.)  
Ulrich Brunner (H. P.)

## PERENNIAL FLOWERS



YUCCA

This class of plants has many practical merits. Being perennial, they grow year after year without renewal and when once established will live for a generation or more with very little care. They bloom so freely that they are unsurpassed for cut-flowers; and their variety is so great that the garden is full of interest, from the little white Helleborus and Trillium, which come to us as the first resurrection song of spring, on through the grand overtures of June and early summer, till the last long requiem of fall when Nature softly drops her pall of leaves over her dead.

And they have great artistic merits. The range of color, form, size, and time of blooming is so varied that there is no limit to their possibilities as garden material for the flower border or formal garden, whilst for the mixed border they are invaluable to color and liven up the shrubbery during the midsummer dearth of bloom.

These flowers made glad the hearts of our grandmothers and many of us have childhood memories of the miracles of beauty they created. But for some unexplained reason they have been neglected for a number of years. In our vain search for something better, many gardeners have planted tender exotics, with much loss of money and good feeling, with the result that there has come about a return to the old-time favorites. The revival of the flowers so popular in "Ye Olde Time" garden is a good sign of our return to a true appreciation of Nature's beauties, and to a large extent to some of the choicest of the wild herbaceous flowers of America. This does not exclude the rich offering of hardy flowers from other sections of the world—notably Europe. Meanwhile, the scientific gardeners and hybridists have been at work producing new strains and varieties and much progress has been made. It is enough to cite the case of the gorgeous Shasta Daisy, which Luther Burbank has evolved from the little field daisies of earlier days.

In planning the perennial garden one should be careful to avoid any inharmonious combinations, for an assemblage of plants is not artistic unless relatedly connected in the grouping. It is unfair to anront the fair name of flowers with improper arrangement.

It is also well to remember that each family has certain habits and peculiarities of its own. Some, like Dianthus, Achillea, Anemone, Aquilegia and Coreopsis, are low-growing and express themselves naturally in the foreground of the taller kinds. Others, like Hollyhocks, Helianthus, Boltonia and Rudbeckia, are naturally tall-growing and should be in the background, where they serve as a foil for the lower plants and have the breadth and scope of earth and sky to properly develop. Others still are of medium growth, like the Phlox and Delphinium, and fit in nicely between; but it is well to guard against planting them with such architectural precision that they form banks, or steps, or terraces, but rather should they be billowed in broken swells like the cheery abandon of the ocean waves.

Perennials die to the ground in winter and grow up again early in the spring. The stalk increases in size with each year and in most instances needs to be dug up after four or five years and replanted after the stalks are separated. Several varieties mentioned are especially adapted for borders. We mention height of growth so as to aid in making selection for desired effect. Further information, if desired, on the subject of hardy herbaceous plants, will be cheerfully given.

## SELECTED LIST OF HARDY PERENNIALS

From a long list of hardy herbaceous perennials we select the following as being the choicest and most satisfactory for ornamental gardening. We advise early spring planting in very rich soil, deeply worked. For an effective border, use plants of the same variety and color as much as possible. Perennials are most effective if planted in groups along the borders of mass plantings of shrubbery so as to blend into the surrounding groups with pleasing contrast.

## PERENNIAL FLOWERS (Continued)

## ACHILLEA—Yarrow

**A. Eupatorium** (Fern-Leaved Yarrow)—Finely cut foliage and brilliant yellow heads of flowers lasting in full beauty all summer. Four to five feet.

**A. Ptarmica Fl. Pl.** (The Pearl)—Pure white flowers. Blooms all summer in the greatest profusion. Strong, erect stems 2 feet high. Valuable for cutting.

## ACONITUM—Monkshood

**A. Napellus**—Large dark blue flowers. August to September. Four feet high. Valuable under trees or in shady positions.

## ALYSSUM—Madwort

**A. saxatile compactum** (Basket of Gold, or Gold Tuft)—Indispensible for rockeries or border, growing one foot high. Blooms in May. Broad, flat heads of bright yellow flowers.

## AMSONIA

**A. salicifolia**—A stout plant, about 2 feet high, with terminal spikes of light steel-blue flowers.

## ANEMONE JAPONICA

## Japanese Windflower

Among the most important of hardy plants. Begin blooming in August and continue in full flower until cut down by hard frost. Fine for cutting. Height, 2 to 3 feet.

**A. japonica alba**—Large, snowy-white.

**A. japonica rubra**—Beautiful rosy-red; stamens bright yellow.

**A. Queen Charlotte**—Large semi-double flowers of pink.

**A. Rosea Superba**—Medium-sized flowers of silvery-rose.

**A. Whirlwind**—Large semi-double pure-white flowers.

## ANTHEMIS—Marguerite

**A. tinctoria**—Bushy habit, growing 15 inches high, producing large golden-yellow, daisy-like flowers during the entire summer.

## ASTILBE

**A. Davidii**—Its 5 to 6 feet high stems are crowned with feathery plumes of deep rose-violet flowers during June and July.

**A. hybrida Moerheimi**—Height, 5 to 6 feet. The spikes of beautiful creamy-white flowers are over 2 feet long. Very fine.



HARDY CHRYSANTHEMUM

## BAPTISIA—False Indigo

**B. australis**—About 2 feet high; suitable for border with dark green deeply-cut foliage and spikes of dark-blue flowers in June.

**B. tinctoria**—Same as above, but flowers a bright yellow in June; 2 to 2½ feet high.

## BOCCONIA—Plume Poppy

**B. cordata**—Beautiful in foliage and flower. Admirable in any planting; 6 to 8 feet high. Flowers terminal panicles of creamy-white during July and August.

## BOLTONIA—False Chamomile

**B. asteroides**—Very showy. Large single aster-like flowers during summer and autumn months. Color, pure white; 5 to 7 feet tall.

**B. latisquama**—Habit like above but the color is of pink slightly tinged with lavender.

## CAMPANULA—Canterbury Bell

These are among the showiest of May and June-blooming perennials. Their bold spikes of flowers in rose-pink, blues and whites make them extra desirable as they are fine for cutting. Period of bloom 4 to 5 weeks, but it can be prolonged if the flowers are pinched out as soon as they fade.

**C. carpatica**—A pretty species growing in tufts not over 8 inches high. Flowers clear blue. Blooms June to October. Fine for edging.

## PERENNIAL FLOWERS (Continued)



SHASTA DAISY

## CAMPANULA -- Canterbury Bell (continued)

- C. latifolia macrantha*—Large purplish-blue flowers. May and June. Height 3 feet.
- C. persicifolia*—Blue flowers during June and July. 2 feet high.
- C. pyramidalis*—Forms a perfect pyramid 4 to 6 feet high, covered with porcelain-blue flowers in August.
- C. rotundifolia*—Beautiful clear blue flowers from June to August. Height one foot.

## CASSIA—American Senna

- C. marilandica*—Bushy, 3 to 4 feet high. Large panicles of bright yellow flowers from July to August. The foliage is also very pleasing.

## CENTAUREA

- C. montana* (Perennial Corn Flower)—Two feet high. Flowers large, violet-blue from July to September. Delights in sunny position. Excellent for cutting.

## OLD - FASHIONED LARGE - FLOWERING HARDY CHRYSANTHEMUMS

Popular because they are hardy and bloom at a time when other plants are destroyed by frost. Valuable for cutting. Colors rose-crimson, Indian red, yellow, pink and white. Strong field-grown clumps.

*Autumn Beauty*—Golden brown.

*Carmelite*—Deep golden yellow.

*Eva*—Flowers a delicate pink; one of our best early varieties.

*Favorite*—Rosy pink; popular.

*G'ory of Seven Oaks*—Dwarf, golden yellow, very free flowering and very early.

*L'Argentullaise*—Deep chestnut, medium height, early.

*Oconto*—A Japanese variety, white, very large flower, strong rigid stem, early.

*Old Homestead*—Soft pink.

*Rosea*—Bright red, wonderfully colored.

*Snowclad*—Pure white, one of the best.

## SHASTA DAISY

*Shasta Daisy*—A decided improvement on the original. Blooms  $4\frac{1}{2}$  to 5 inches across, of pure, glistening white. Free flowering all summer and fall.

## CIMICIFUGA—Snake Root

- C. racemosa simplex*—Valuable because of its late flowering, from September 15th to November 1st. Two and one-half to three feet high, terminated with a dense spike of white flowers which last when cut a long time.

## CLEMATIS

- C. heracleafolia Davidiana* (Shrubby Clematis)—Bush habit, 2 to 3 feet high. Fresh, bright green foliage and tubular bell-shaped flowers of deep lavender blue during August and September. Deliciously fragrant.

## CONVALLARIA—Lily of the Valley

This is often starved and neglected and relegated to some poor, out-of-the-way corner; but this popular and fragrant subject, like most other plants, repays for being well treated, and if the bed is given a liberal top-dressing of well-decayed manure in early spring, it will show the effect by increased size, number and vigor of the flowers. The stock we offer is strong clumps, especially suited for outdoor planting, which should be done before the end of April.

## COREOPSIS

- C. lanceolata grandiflora*—Very popular. Flowers rich golden yellow. Invaluable for cutting. Main crop in June, but continues in bloom the entire summer and autumn.



## PERENNIAL FLOWERS (Continued)

## DELPHINIUM—Hardy Larkspur

The Larkspur begins blooming in June and by cutting off the plants close to the ground as soon as each crop has faded a second and third will succeed. The stalks are very tender and should be staked when about 3 feet high.

**D. Belladonna**—The freest blooming of all Delphiniums. Flowers a clear turquoise blue.

**D. grandiflorum chinense**—A pretty dwarf species with fine feathery foliage. Flowers of intense gentian blue.

**D. grandiflorum chinense-album**—A pure white form of *L. chinense*.

**D. formosum**—The old favorite. dark blue with white center. Vigorous and free flowering.

**D. King of Delphiniums**—One of the most distinct of the newer hybrids. Strong grower. Flowers of gigantic size, semi-double and of a deep blue with large white eye.

**D. Moerheimi**—The first really white Delphinium. Vigorous grower, 5 feet high. Flowers pure white, blooming from June till frost.

## DIELYTRA OR DICENTRA

**D. spectabilis** (Bleeding Heart)—The old-fashioned favorite, with long racemes of graceful, heart-shaped pink flowers. Does well in shade. Blooms in May. Height 2 feet.

## DICTAMNUS—Gas Plant

A very showy border perennial, 2½ feet high. Fragrant foliage and spikes of flowers during June and July. Must have the sun. Improves with age.

**D. Fraxinella**—Rosy pink flowers.

**D. Fraxinella Var. alba**—Pure white flowers.

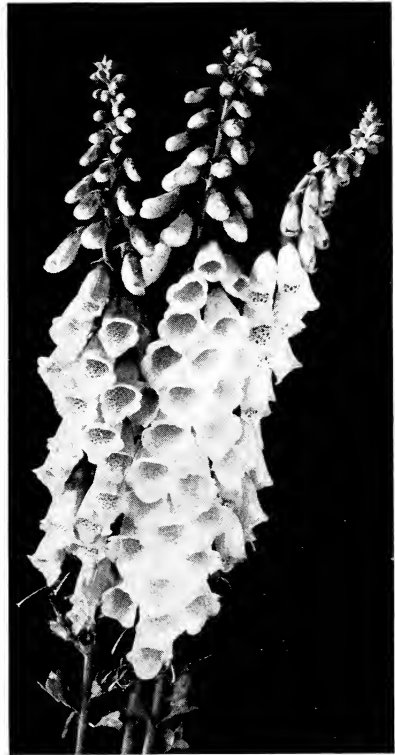
## DIGITALIS—Foxglove

Old-fashioned, dignified and stately. Good in any garden. Four to six feet high.

**D. gloxinaeflora**—A beautiful strain of the finely spotted varieties. Can send them in white, purple, rose, or mixed. Order by color.

## FUNKIA—Plaintain Lily

These are among the easiest plants to manage. They are attractive for the border even when not in bloom because of their broad, massive foliage. Succeed in either sun or shade.



DIGITALIS

**F. lanceolata**—Flowers lilac colored in September. Two feet high.

**F. subcordata grandiflora**—Very large flowers in August and September. Fragrant.

**F. undulata media picta**—Green and white variegated foliage. Purple flowers in July. Height 2 feet. Makes fine edging.

## GAILLARDI—Blanket Flower

**G. grandiflora**—One of the showiest perennials. Succeeds in any sunny spot. Begins to flower in June and continues all season. Flowers are large, center a dark red-brown, while the petals are marked with rings of brilliant crimson, orange and vermilion—often all combined in one flower. Excellent for cutting. Height 2 feet.

## GEUM—Avena

Pretty border plants about 15 inches high, producing showy, bright-colored flowers from May to July.

**G. coccineum**—Brilliant scarlet flowers.

## PERENNIAL FLOWERS (Continued)



IRIS GERMANICA (GERMAN IRIS)

**GYPSOPHILA—Baby's Breath**

Thrives anywhere if sunny.

- G. paniculata**—This possesses a grace not found in any other perennial. Blooms during July and August. Two to three feet high. Flowers are minute, of pure white and together with its foliage gives the plant a beautiful gauze-like appearance. Excellent to use in combination with other flowers in bouquets.

**HELIANTHUS—Hardy Sunflowers**

Among the most effective for large borders, among shrubbery or as large clumps. Free-flowering and succeed in any soil.

- H. Maximillianii**—Late-flowering sort, producing golden yellow flowers in graceful sprays in October when all others have finished. Good for cutting. Five to seven feet high.

- H. multiflorus fl. pl.** (Double Hardy)—Large dahlia-like golden-yellow flowers in July and August. Four feet high.

**HELENIUM—Sneeze Wort**

Desirable border plant. Succeeds anywhere if given a sunny location. Broad-spreading heads of flowers, useful for cutting.

- H. Autumnale superbum**—Golden-yellow flowers during late summer and fall months. Five to six feet tall.

- H. pumilum magnificum**—Most useful, about 18 inches high. Completely smothered with golden-yellow blossoms all summer.

- H. Riverton Beauty**—Rich lemon-yellow with large purplish-black cone. August and September. Four feet tall.

- H. Riverton Gem**—Old-gold changing to wall-flower red. Four feet high.

**HELIOPSIS—Orange Sunflower**

Similar in general habit to Helianthus, but begins blooming in July and throughout August.

- H. Pitcheriana**—Three feet high. Flowers of a beautiful deep golden-yellow about 2 inches in diameter. Useful as a cut flower.

**HEUCHERA****Alum Root or Coral Bells**

Most desirable dwarf, compact, bushy plants, 1½ to 2 feet high. Flowers July and August.

- H. sanguinea**—A bright coral-red sort. Bears loose, graceful spikes of flowers in greatest profusion. Excellent for border and of great value for cutting.

**HEMEROCALLIS—Yellow Day Lily**

Popular plants belonging to the Lily family. Succeed everywhere.

- H. Dumortieri**—Very dwarf, 18 inches; flowering in June; rich cadmium-yellow; buds and reverse of petals bronze-yellow.

- H. flava**—Best known variety; very fragrant; deep lemon-yellow flowers in June and July. Height 2½ to 3 feet.

- H. fulva**—Grows from 4 to 5 feet high with trumpet-shaped flowers of a neutral orange color with darker shadings. June and July.

**HELLEBORUS NIGER****Christmas Rose**

Valuable because it yields with utmost freedom in very early spring its beautiful blossoms—two or three inches across. Does best in a partially shaded position.

**HIBISCUS—Mallow**

A desirable plant for the hardy border. Succeeds in any sunny position. Loves moist soil. Grows 3 to 5 feet high.

- H. Mallow Marvels**—A robust type of upright habit. Flowers large in all the richest shades of crimson, pink and white; mixed colors.

- H. Moscheutos**—Flowers six inches in diameter, of light rosy-red with darker eye.

- H. "Crimson Eye"**—Immense sized flowers of purest white with a large spot of deep velvety crimson in the center.



## PERENNIAL FLOWERS (Continued)

### HOLLYHOCKS

Grow from 6 to 8 feet high and are a necessity in any old-fashioned garden. Can supply the following colors in either double or single: White, red or maroon.

#### IBERIS—Hardy Candytuft

Most desirable of dwarf plants (8 to 10 inches), with evergreen foliage completely hidden with dense heads of flowers early in spring.

**I. Little Gem**—Very dwarf. A fine rock plant.

**I. sempervirens**—This sort bears innumerable flat heads of pure white flowers.

### IRIS

The improved form of these beautiful flowers has placed them in the same rank as the Phlox and Peony. They bloom about the middle of June and continue for five or six weeks.

**I. Kaempferi** (Japanese Iris)—In all colors. Order the color you prefer.

**I. germanica**—Bloom in May. All colors. Order those you prefer.

**I. pseudacorus**—The common yellow Water Flag, suitable for marshes and water courses. Bloom May and June. Height, 4 feet.

**I. sibirica**—Purplish blue flowers. Useful for cutting. Three feet high.

#### LIATRIS—Blazing Star

Showy and attractive. Succeeds anywhere. Produces large spikes of flowers in July and August.

**L. scariosa**—Deep purple flowers, 3 to 4 feet high.

#### LINUM—Flax

**L. perenne**—Desirable for border or rockery. Two feet high. Light, graceful foliage and large blue flowers all summer.

### LOBELIA

Handsome border plants. Bloom from early August till late September.

**L. cardinalis** (Cardinal Flower)—Rich fiery cardinal flowers 24 to 30 inches high.

#### LUPINUS—Lupine

Effective plants. Large spikes of flowers. Bloom in May and June. Height 3 feet.

**L. polyphyllus**—Clear blue in color.



A BED OF PAEONIES

**L. Moerheimii**—Color a combination of light and dark shades of pink.

#### LYCHNIS—Campion

Easy culture, thrive in any soil.

**L. chalcedonica**—A most desirable plant. heads of brilliant orange-scarlet in June and July. Two to three feet high.

**L. viscaria** (Double Red)—Forms a dense tuft of evergreen foliage and in June sends up spikes of handsome double, deep red, fragrant flowers. One foot high.

#### LYTHRUM

**L. roseum superbum** (Rose Loose-Strife)—A strong-growing plant, 3 to 4 feet high. Thrives almost anywhere. Produces large spikes of rose-colored flowers from July to September.

#### MONARDA—Bergamot

Showy plants of 2 to 3 feet in height. Succeeds anywhere. Aromatic foliage.

**M. didyma**—Brilliant crimson-scarlet flowers during July and August.

#### MYOSTIS—Forget-Me-Not

**M. palustris semperflorens**—Hardly ever out of flower. Useful in shady spots.

**M. alpestris robusta grandiflora**—The large spring-flowering sort with intense sky-blue flowers, bright and attractive.



# PEONIES

The old-fashioned peony was popular, but the newer varieties, of which there are many, bid fair to rival the rose in popularity as the Queen of Flowers. Requiring no care and asking only sunlight and a liberal supply of water during their growing season, they yield an abundance of bloom and are literally the flower for the millions. Do not plant too deep; the crowns should not be covered deeper than two inches.

## PAEONIES

**P. officinalis**—This is the common peony of pink, red and white. Order by color.

### PAEONIES—Named Varieties

We indicate by letter E—early, M—midseason and L—late varieties.

**Couronne d'Or**—Snow-white with golden yellow stamens and delicate carmine markings. (L.)

**Delachei**—Deep crimson purple. (M.)

**Delicatissima**—Large size, typical rose type of deep pink color. A splendid commercial variety; very free-flowering. (M.)

**Duchess de Nemours**—Sulphur-white changing to pure white. (M.)

**Duke of Wellington**—Sulphur-white. Fragrant. Ideal for cutting. (M.)

**Edouard Andre**—Semi-double flowers of dark carmine-violet and golden-yellow stamens. (E.)

**Felix Crousse**—The ideal brilliant red. (M.)

**Festiva Maxima**—Considered the finest white in cultivation. (E.)

**Floral Treasure**—Rich, soft pink.

**Francois Ortegat**—Semi-double; large

purplish crimson bloom with brilliant golden-yellow anthers; very striking.

**Fragrans**—Solferino red with slight silvery reflex; compact full flowers; strong, vigorous grower; extensively grown for cut flowers.

**Louis Van Houtte**—Rich, dark crimson developing a slight silvery tip as flowers age. (L.)

**Madame Crousse**—Light pink. (M.)

**Madame de Verneville**—Bomb type, early; one of the best varieties on the market. Guard petals pure white, very large; the blooms are very full and double, of the purest white except a few cream-colored petals and four red flakes on central petals. Has the true June rose fragrance. (E.)

**Madame Jules Elie**—Flesh-colored rose. (M.)

**Marie Lemoine**—An extra late flowering ivory white. (L.)

**Monsieur Jules Elie**—Probably the largest flowered; color pale lilac rose with silvery reflex. (E.)

**Queen Victoria (Whitley)**—There are two well-known varieties of this name. This is the standard pure white market variety for storage.

## PERENNIAL FLOWERS (Continued)

**PAEONIES—Named Varieties  
(Continued)**

**Reine Hortense**—Violet rose.  
(M.)

**Richardson's Dorchester**—Salmon pink; one of the very best late ones. (L.)

**Rosea superba**—Brilliant, deep cerise pink; blooms compact and perfectly formed; healthy growth; long stems; keeps well. (M.)

**Rubra superba**—Rose type, very late; magnificent rich brilliant crimson; without stamens; very large, full and double; highly fragrant. (L.)

**PAEONY TENUIFOLIA  
Cut or Fringe Leaf**

**P. tenuifolia fl. pl.** (Cut-Leaved Paeony)—Dark crimson. June.

**PAPAVER ORIENTALE  
Large Oriental Poppies**

**P. orientale Goliath**—A fiery scarlet variety of this genus. Height 3 to 3½ feet. Blooms in May and June. During their resting period after blooming care should be taken not to disturb the roots by cultivation.

**P. orientale Mahoney**—A dark crimson-maroon, shaded mahogany variety of the above.

**PAPAVER NUDICAULE  
Iceland Poppies**

Of neat habit, forming a tuft of bright green fern-like foliage from which spring throughout the entire season a profusion of slender leafless stems one foot high, graced with charming cup-shaped flowers. Colors white, yellow and orange-scarlet. Order by color.

**PHLOX**

Said by some to be the most satisfactory of all perennials. The sorts given below are among the very best.

**Altion**—Pure white with faint red eye.

**Baron Von Dedem**—Brilliant cochineal-red, with salmon shadings. Medium.

**Bridesmaid**—Pure white with large crimson-carmine eye.

**Champs Elysees**—Bright rosy-magenta. Dwarf.

**Eclairer**—Brilliant rosy-magenta, with large, lighter halo.

**FESTIVA MAXIMA PAEONY**

**Elizabeth Campbell**—Soft pink, large flower. Dwarf.

**Fraulein G. Von Lassburg**—Pure white, immense panicles. Tall.

**Jeanne d'Arc**—A good late-flowering pure white.

**Le Mahdi**—Deep velvety-purple, large spikes. Dwarf.

**Miss Lingard**—This early-flowering variety is very popular. Grows about two feet high; begins blooming in May and continues in flower until late in October. Flowers pure white.

**R. P. Struthers**—Bright rosy-carmine, with claret-red eye.

**Pecher d'Island**—Lavender-cerise. Medium.

**Sunset**—Dark rosy-pink. Tall.

**Divaricata Canadensis**—A native species quite unlike the large-flowering sorts listed above. Begins blooming in April and continues through May. Bears large lavender and fragrant flowers on stems about ten inches high.

**PHLOX SUBLATA—Moss Pink**

An early spring-flowering type with pretty moss-like evergreen foliage which during the blooming season is completely hidden under the masses of bloom. An excellent plant for the border, rockery, carpeting ground or covering graves.



SEDUM (STONE CROP)

## PERENNIAL FLOWERS (Continued)

### PHLOX SUBLATA (continued)

Var. Alba—White.

Var. Lilacina—Light lilac.

Var. Rosea—Bright rose.

**PENSTEMON—Beard's Tongue**  
Useful and showy.

*P. barbatus Torreyi*—Spikes of brilliant scarlet flowers in July and August. Three to 4 feet tall.

*P. digitalis*—Spikes of long purple-white flowers with purple throats during June and July. Two to three feet high.

### PHYSOSTEGIA—False Dragon Head

One of the most beautiful of our mid-summer flowering perennials. Forms a dense bush 4 to 6 feet high.

*P. virginiana speciosa*—Spikes of a bright but soft pink delicate tubular flowers.

### PINKS

Old favorites of the Hardy Garden sort bearing sweet, clove-scented flowers during May and June. Indispensable for the edge of the hardy border and for cutting. One foot high. Assorted colors. Order by color.

### PLATYCODON—Balloon Flower

Closely allied to the Campanulas. Grow 2 to 2½ feet high. Begin blooming in July and continue about a month.

*P. grandiflorum*—Deep-blue cupped star-shaped flowers.

### POLEMONIUM—Jacob's Ladder

*P. reptans*—Useful border plants 12 inches high, succeeding best in partially shaded positions. Deep green finely-cut foliage and spikes of showy blue flowers in May and June.

### POTENTILLA—Cinquefoil

Charming plants for the border with single or double flowers produced in profusion from June to August. Eighteen inches tall.

*P. atrosanguinea*—Rich crimson single-flowered sort.

### PYRETHRUM HYBRIDUM

Easy to grow. Loves the sun. Bloom in June. The fine fern-like foliage is attractive at all times.

**Single-Flowering Sorts**—Mixed colors only.

**Double-Flowering Sorts**—Crimson, pink and white colors. Order by color.

### PYRETHRUM ULIGINOSUM

#### Giant Daisy

Grows 3 to 4 feet high and is covered with large white daisy-like flowers three inches in diameter from July to September.

### RANUNCULUS—Crow-Foot

*R. aconitifolius fl. pl.* (Fair Maids of France)—Forms a branching bush 2 feet high. Flowers double, pure white in May and June.

### RUDBECKIA—Cone-Flower

Indispensable for the hardy garden. Grow and thrive anywhere, giving a wealth of bloom which are well suited for cutting.

*R. "Golden Glow"*—A well-known popular plant. Robust grower. Five to six feet high. Produces a mass of double golden-yellow flowers from July to September.

*R. Newmani*—Dark orange-like flowers with deep purple cone borne on stiff, wiry stems 3 feet high. Blooms from July to September.

## PERENNIAL FLOWERS (Continued)

**SALVIA—Meadow Sage**

- S. azurea**—A native species, grows 3 to 4 feet high, producing pretty sky-blue flowers during August and September in the greatest profusion.

**SAXIFRAGA—Megasea**

Thrives in any kind of soil. Grows about one foot high. Good for border planting. Foliage a deep green which alone makes them desirable. Blooms in early spring as soon as frost is out of the ground.

- S. Compacta**—Bright rose color.

**SEDUM—Stone Crop**

- S. acre** (Golden Moss)—A dwarf variety much used for covering graves; foliage green; flowers bright yellow.

- S. spectabile**—One of the prettiest tall-growing species. 18 inches high. Broad, light green foliage with immense heads of handsome showy rose-colored flowers. Blooms late in the fall.

- S. brilliant**—A rich, colored form of the preceding, being a bright amaranth red.

**SPIREA—Goat's Beard**

Elegant border plants with feathery plumes of flowers and neat, attractive foliage. Succeeds best in a half-shaded location.

- S. aruncus**—A splendid variety, 3 to 5 feet high. Bears feathery panicles of white flowers in June and July.

**STATICE—Great Sea Lavender**

- S. latifolium**—A most valuable plant with tufts of leathery leaves and immense candelabra-like heads, frequently 1½ feet high and 2 feet across, of purplish-blue minute flowers, July and August.

**STOKESIA—Cornflower Aster**

- S. cyranea**—A native plant 18 inches high, bearing flowers freely from early June until September, of handsome lavender-blue, which measure 4 to 5 inches across. Succeeds in any open, sunny position.

**SWEET WILLIAM  
Dianthus Barbatus**

A well-known, attractive, free-flowering hardy perennial. Bloom in early summer.

- S. W. Newport Pink**—The prettiest color among Sweet Williams; a lovely salmon or watermelon pink.

- S. W. Pure White**—Very large.

- S. W. Scarlet Beauty**—Rich, deep scarlet; very effective.

**TRADESCANTIA—Spider Wort**

- T. virginiana**—Produces a succession of blue flowers all summer.

**TRITOMA****Red-Hot Poker, Flame Flower or Torch Lily**

The early, free and continuous blooming qualities of the Tritoma make it one of the great bedding plants. Valuable for massing. Not hardy.

- T. Pfitzerii**—In bloom from August to October with spikes three to four feet high and heads of bloom of rich orange-scarlet.

- T. Saundersii**—One of the earliest to bloom, beginning in June and continuing until end of August. Deep coral-red, changing to chrome-yellow. Three feet high.

**TROLLIUS—Globe Flower**

Desirable and free-flowering. Flowers giant buttercup-like on stems 1 to 2 feet high from May until August.

- T. caucasicus** ("Orange Globe")—Large, deep, orange-colored bloom as above.

**TUNICA**

- T. Saxifraga**—A pretty tufted plant with light pink flowers produced all summer.

**VALERIANA—Valerian**

- V. Coccinea**—Showy heads of reddish flowers from June to October. Two feet high.

**VERONICA—Speedwell**

- V. rupestris**—A fine rock plant, growing 3 or 4 inches high, thickly matted deep-green foliage, hidden in spring under a cloud of bright-blue flowers.

- V. spicata**—An elegant border plant about 1½ feet high, producing long spikes of bright-blue flowers in June and July.

- V. spuria**—Amethyst-blue flowers in June and July. Height 2 feet.

- V. longifolia subsessilis** (Japanese Speedwell)—The showiest and best of all the Speedwells. Forms a bushy plant 2 to 3 feet high with long dense spikes of deep-blue flowers from the middle of July to early September.

- VINCA—Periwinkle or Trailing Myrtle**  
**V. minor alba**—An excellent dwarf evergreen used extensively in carpeting the ground under shrubs and trees or on graves where it is too shady for other plants to thrive.

**YUCCA—Adam's Needle**

- Y. filamentosa**—Among hardy ornamental plants this can be classed at the head of the list. Its broad, sword-like foliage, 5 to 6 feet tall, branched spikes of large, fragrant, drooping creamy-white flowers during June and July make it an effective plant for all positions.

## GRASSES

Can be used in many ways and positions with telling effect. The varieties listed are the best of the many.

**Arundo Donax** (Great Reed)—A magnificent sort, growing to a height of 20 feet.

**Erianthus Ravennae** (Plume Grass)—Closely resembles the Pampas grass. Ten to twelve feet high.

**Eulalia gracillima Univittata** (Japan Rush)—Of graceful habit with very narrow foliage of a bright green color with silvery midrib. Six to seven feet high.

**Eulalia japonica**—Has long, narrow, graceful green foliage and when in flower the attractive plumes are 6 to 7 feet high.

**Eulalia japonica variegatus**—Very ornamental; long, narrow leaves, striped green, white and often pink or yellow. Six feet high.

**Eulalia japonica zebrina** (Zebra Grass)—The long blades of this grass are marked with broad yellow bands across the leaf. Six to seven feet high.

**Pennisetum japonicum** (Hardy Fountain Grass)—This variety grows about 4 feet high, foliage narrow, of a bright green, while the cylindrical flower heads carried well above the foliage are tinged with bronze-purple.

Wanted---

A Man

We do not care whether you are worth one or a million dollars; but your character must be above reproach if you act as our representative.



HYACINTHS

## GARDEN AND GREENHOUSE PLANTS (Not Hardy)

### CALADIUM ESCULENTUM (Elephant's Ear)

Effective in beds, borders and for planting on lawns. Will grow in any good soil. Height 4 to 5 feet, its immense leaves frequently 3 feet long.

### CANNAS

No other bedding plant gives such uniform good results. Succeeds in any sunny position. For best effect plant in large masses of one color. Place plants or bulbs two feet apart.

#### DWARF VARIETIES

Buttercup—Yellow flowers.

Mrs. A. F. Conrad—Pink flowers.

Souvenir d'Antoine Crozy—Scarlet flowers.

Wyoming—Yellow flowers.

#### TALL VARIETIES

King Humbert—Scarlet flowers.

Uncle Sam—Yellow flowers.

### DAHLIAS

The Dahlia is one of the most showy of our autumn flowers. Commencing to flower in August, they are a perfect blaze of bloom until stopped by frost in late autumn. The Cactus, Single and Pompon varieties are especially fine for cut flowers. We know of nothing more showy for table decoration than a loosely arranged bunch of long-stemmed Cactus or Single Dahlias. They delight in a deep, rich soil, should be planted three and one-half to four feet apart and be tied to heavy stakes to prevent strong winds from breaking them down. The roots should be dug up in the fall and hung up in a dry cellar during winter. We have a large collection of all the best colors and varieties.

Colors—Dark red, pink, purple, red, scarlet, white, yellow, and the variegated.

Order by color.

## GLADIOLI

The Gladiolus is the most beautiful of the summer or tender bulbs, with tall spikes of flowers. some two or more feet in height, often several from the same bulb. The flowers are of almost every desirable color, brilliant scarlet crimson, creamy white, striped, blotched and spotted in the most curious manner. As cut flowers they are the most lasting of anything we know. By cutting the spikes when two or three of the lower flowers are open, the entire spike will open in the most beautiful manner. Set the bulbs from six to nine inches apart and about four inches deep. Plant from middle of April to first of June. It is a good way to plant at two or three different times, ten days or two weeks apart. This will give a succession of bloom from July to November. In the fall, before hard frost. take up the bulbs, remove the tops, leave to dry in the air for a few days, and store in some cool place, secure from the frost, until spring.

**Colors**—Cream, blue, pink, purple, red, scarlet, white, yellow and the variegated. Order by color.

## TUBEROSES

One of the most beautiful summer-flowering plants, producing spikes from two to three feet high, of double, pure waxy-white flowers, delightfully fragrant. May be kept in bloom for a long time by planting from the first of April to the first of June. Very desirable for bouquets or baskets.

## HARDY BULBS FOR FALL PLANTING

We give herewith a list of the choicest flowering bulbs. All the kinds mentioned under this head are intended only for fall planting. Plant the bulbs three to four inches deep in a rich, loamy or light soil. Cover the beds six inches thick with leaves during winter and remove early in spring.

## CROCUS

Naturalized in the grass, or planted thickly in irregular lines, as a border for taller-growing bulbs, or grown in any way whatever, the Crocus is always a cheery and charming little flower. It opens among the first flowers of early spring, while the snow yet lies white on north hillsides, in a cold, dull time, when its bright colors are much appreciated. We have them in Blue, White, Striped and Yellow.

## GALANTHUS (Snowdrop)

**Nivalis**—This, the earliest of spring-flowering bulbs, is universally admired for its elegant snow-white drooping blossoms. Plant thickly in groups in some sheltered spot and the flowers will surprise you before the snow is gone.

## HYACINTHS

This deservedly popular bulbous plant is without doubt the most beautiful and useful of all spring-blossoming bulbs; its delightful fragrance and the numerous tints of its beautiful trusses of bell-shaped flowers render it invaluable to all lovers of flowers and afford pleasure and delight to millions of the human race. It is of the easiest culture, and with any reasonable care no one can fail to meet with success in its cultivation. It is, however, highly important to secure the bulbs and have them planted in the fall.

**POT CULTURE**—A four-inch pot is the best size for the successful growth of the bulb. It delights in light, rich, sandy soil; when placed in the pot the upper surface of the bulb should be above the soil. After potting, water thoroughly and place them in a dark, cool place in the cellar or out of doors, well covered with sand or other like material, there to remain until well rooted, when they should be taken in the house or greenhouse to bring them into flower. When in active growth they should have an abundance of water. Support the flower stems with light stakes if it is necessary, to keep them erect.

**GLASS CULTURE**—Hyacinths are very pretty and very interesting when grown in glasses. Their management thus is simple and as follows: Fill the glass with clean rain water, so that the base of the bulb when set in the receptacle for it on top of the glass will just touch the water. Set away in a cool, dark place until



## HARDY BULBS FOR FALL PLANTING (Continued)

well rooted. A succession may be kept up in the manner recommended for pot culture. Change the water frequently, washing out the roots, if necessary, to cleanse them of any foreign substance. A piece of charcoal in the glass will serve to keep the water sweet and also affords nourishment to the plants.

**OUTDOOR CULTURE**—Plant in October or early in November, in soil deeply cultivated and rich. Set the bulbs about six inches apart and four inches deep, and when convenient place a handful of sand around each to prevent rot. Cover the surface of the bed with light short manure, as a protection to the bulbs during the severe months of winter. Remove this covering as soon as the severe frost is gone in spring. After flowering, and when the foliage is well matured, the bulbs may be removed from the soil and kept dry until the following fall; or, if the bed is wanted for summer-flowering plants before the foliage is ripened, the bulbs may be carefully removed and again covered with soil in any out-of-the-way corner of the garden until they have matured their foliage. Some cultivators allow their bulbs to remain in the beds several years undisturbed and with excellent results.

**Colors**—Dark blue, light blue, pink, purple, red, yellow, and white.

Order by color.

## JONQUILS

A species of *Narcissus* with fragrant bright-yellow flowers, suitable for house or garden culture. Requires the same treatment as *Narcissus*.

## LILIES

No class of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance. They thrive best in a dry, rich soil, where water will not stand in winter. After planting they require very little care and should not be disturbed for several years, as established plants bloom more freely than if taken up annually.

**L. auratum** (Gold-Banded Lily)—Large graceful flowers of six petals of a delicate ivory-white, thickly studded with chocolate-crimson spots and striped through the center a golden yellow.

**L. Harrissii** (Bermuda Easter Lily)—The flowers are large, trumpet-shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower.

**L. longiflorum** (Japanese Easter Lily)—A pure waxy white, often tinged with green at the base; deliciously fragrant.

**L. pardalinum** (Leopard Lily)—An easily grown lily for general culture. Scarlet, shading to rich yellow, spotted with purple-brown.

**L. speciosum album**—Large white flowers of great substance with a greenish band running through the center of each petal.

**L. speciosum rubrum**—White, heavily spotted with rich, rosy-crimson spots.

**L. speciosum magnificum**—Rich, deep red.

**L. superbrum** (American Turk's Cap)—A beautiful native variety, bright reddish-orange, spotted, 3 to 6 feet high; blooms in August.

**L. tigrinum splendens** (Tiger Lily)—Bright orange-scarlet with dark spots; fine.

**L. candidum** (Madonna Lily)—A delicately fragrant, pure waxy-white lily, of easy culture.

## NARCISSUS

Admirably adapted for garden decoration in early spring. They are easily cultivated; hardy. Very showy and fragrant. Should be planted in the fall, same as tulips. Fine for winter culture in pots or boxes.

I am satisfied with the trees you sent me. They are growing fine and look good.—H. Zimmerman, Detroit Mich.

I received your nursery stock in good condition. I am well satisfied with your deal of last spring.—J. W. Rydberg, Chicago, Ill.



TULIPS

## TULIPS

The Tulip is so perfectly hardy and so easily cultivated that it never fails to please. We know of nothing that for the amount of money invested will give a more gorgeous show during early spring. It thrives well in almost any soil. Should be planted during October and November. Plant three inches deep in rows nine inches apart. Allow the ground to freeze before putting on their winter covering. They may remain in the beds two or three years, when they should be taken up and replaced with new bulbs. If desired, bedding plants may be planted between the rows, as the plants will not have made much growth before the Tulips have ripened up, when the tops may be raked off and the plants allowed to cover the whole bed. Tulips succeed admirably in pots or boxes for sitting room or parlor decorations during winter.

**Single**—In colors of pink, blue, red, white, yellow and variegated.

**Double**—In colors of pink, purple, red, yellow and white.

**Darwin Tulips**—These are a strain of long-stemmed late-blooming self-colored Tulips. Various colors, mixed.

**Parrot Tulips**—This species with curiously enlarged and cut or frayed petals and odd color markings.

Jackson, O., July 19, 1920.

The Greening Nursery Co.,  
Monroe, Mich.

Attention—Mr. Shepherd

Dear Sirs:

It may please you to know that your planting in our gardens is coming along fine, and we are surprised and gratified, for we had no idea that the results would show so early the first year.

The gardens are really beautiful and you should have views now giving you a faint idea of the physical picture produced.

The landscape designing, the setting of evergreens, shrubbery, perennials and roses, show a truly artistic spirit, guided perhaps by experience, and you as well as ourselves are to be congratulated on producing one of the most beautiful small garden scenes in America. I trust you will run down soon and see for yourself. Assuring you of my high appreciation of your services rendered, I am,

Yours very truly,

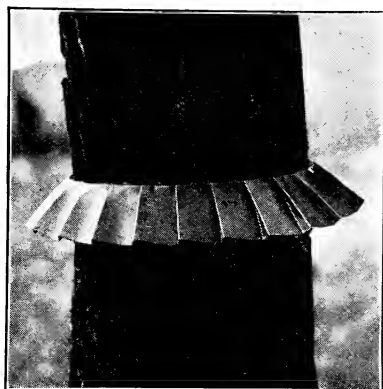
JOHN E. JONES.



## STANDARD TREE BANDS

**The First Effective Device Placed on  
the Market for Protecting Trees from**

**CATERPILLARS,  
WORMS and  
INSECTS**



**POSITIVE PROTECTION**

**Needed Everywhere--Sells Everywhere  
City, Country and Suburban Districts**

It takes a generation to grow a large shade tree. Pests may destroy it in one season. Every lover of trees will be or should be interested in this device which will positively protect his trees for one season cheaply and effectively.

These tree bands are made of heavy waterproof paper, with a sticky, repellant material under the umbrella-like canopy. This canopy protects the "gum stickum" from the weather, as well as from dirt, dust and falling leaves. No climbing caterpillar or insect can pass this sticky material. It catches them and holds them if they set foot upon it.

Attached to the band, on the inside, is a strip of fluffy felt. This felt fills up the depressions in the bark and prevents passage under the band. No cutting away of bark is necessary. The felt fills it up.

These tree bands are guaranteed to be effective for the season, in all weathers and at all temperatures in which worms or insects are active (about 40 degrees Fahr. to highest summer heat).

Put up in rolls, 25 and 100-foot lengths, flat when boxed, mushrooms when tacked on tree.

Easily applied. Simply cut length to encircle tree. Tack on with small tacks or brads, then raise the outer band until it stands out like an umbrella. It will mushroom as shown in cut and so remain. It only takes a moment.

These bands are far cheaper and better than the usual sticky materials applied direct to bark. Positively can not injure tree. Can be taken down and discarded at end of season.

This is the most effective and practical method of banding trees yet devised—also the cheapest.

### PRICE, CASH WITH ORDER

25-Foot Roll .....\$1.75

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## INDEX

The index is a time-saver. Both salesmen and patrons will find it so. We have also included below a list of the Departments into which this catalog is divided. It will be helpful, too. The complete index which follows Departments includes both the botanical and common names of species and varieties of all the deciduous and evergreen trees and all ornamental stock that we are growing and have to offer.

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